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A PUBLICATION OF THE DEFENSE ACQUISITION UNIVERSITY

The Tools and the Training for the Future

*Today's Plan for
Tomorrow's Workforce*

Defense AT&L interviews
Maj. Gen. Thomas J. Owen, USAF
*Former Commander,
Warner Robins Air Logistics Center*

ALSO

Contracting Workforce Development

A Different Kind of Force Development

A Team Approach for Workforce Development

Developing an Integrated, Agile, and
High-Performing Future Workforce

Excellence in Diversity and Recruitment

Special Edition
**AT&L Human Capital
Initiatives**

Some photos appearing in this publication may be digitally enhanced.

Cover background image: Macon State University and students.

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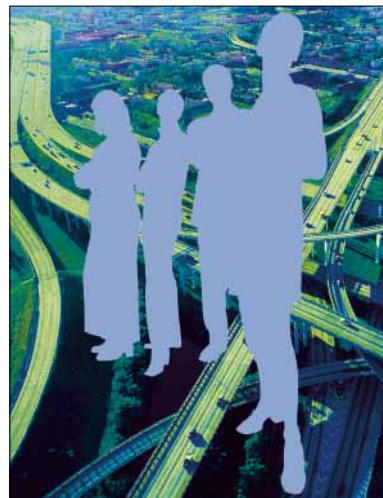
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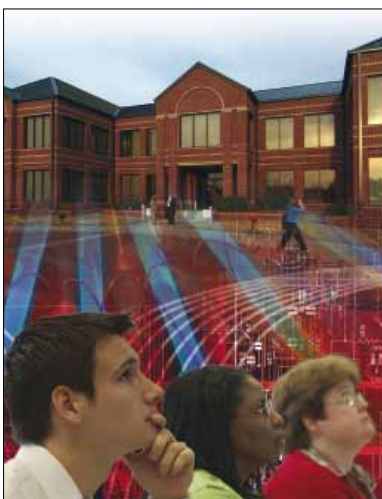
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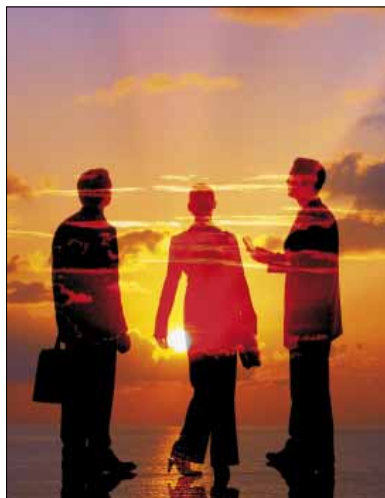


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The Tools and the Training for the Future

Today's Plan for Tomorrow's Workforce

*Maj. Gen. Thomas J. Owen, USAF
Former Commander, Warner Robins Air Logistics Center*

Transformation is a big word in the Department of Defense—transformation not only in DoD operations, but in recruiting, training, and retaining human capital. Warner Robins Air Logistics Center, Air Force Materiel Command, is piloting multiple innovative initiatives to interest, attract, recruit, and train future Air Force employees. This community and base partnership begins at the local Museum of Aviation. Last year, 46,000

students from kindergarten to 12th grade participated in museum programs designed to make science, technology, and aerospace fun and interesting for all ages. Working with secondary schools, the base has created a summer intern Youth Apprenticeship Program that allows students to gain firsthand experience with specific careers on the base. At the college level, certification programs, cooperative education (co-op) internships, and educational partnerships all pipeline graduates into jobs at the base. These cooperative base and community initiatives have a single unifying goal: Raise student awareness of the exciting careers available in the Air Force, preparing them to assume future Air Force jobs.

In March 2008, *Defense AT&L* interviewed Maj. Gen. Thomas J. Owen, then commander of Warner Robins Air Logistics Center, to obtain further details on how the center is implementing this innovative strategy.

Q Can you begin with an overview of your job and your responsibilities as commander, Warner Robins Air Logistics Center?

Through a complex system of forecasting, we're able to let [technical colleges] know, "We're not doing as much sheet metal work these days as we were back in the 1980s. We're doing more high-tech material work, so we need you to expand your course offerings in that area."

A I command the Warner Robins Air Logistics Center at Robins AFB, Ga. In that role, I oversee worldwide logistics support for C-130 and C-5 transport aircraft, F-15 fighters, and U-2 reconnaissance aircraft as well as sustainment for remotely piloted vehicles; Air Force helicopters; air-to-air missiles; surface motor vehicles; and high-technology airborne electronics, avionics, and electronic warfare requirements. ALC provides logistics support and sustainment for the E-8C Joint STARS weapon system through a contractor logistics support depot partnership. The center also oversees Global Reach Improvement Program modifications and share systems sustainment support for the C-17 transport aircraft. Warner Robins is one of three Air Force logistics centers that sustain the Air Force warfighting team. It is the largest industrial complex in Georgia, employing a workforce of over 20,000 civilians, military members, and contractors.

Q *From your perspective, what are the big challenges and changes that Warner Robins might be facing in the future, and what is your strategy for facing those challenges and changes?*

A One primary challenge is planning and preparing for the long-range—10-plus years—future. When I arrived at the Warner Robins ALC, I began encouraging my leaders to first reflect on the past and then project into the future. For example, in the area of workforce development, the skill sets of many people who worked here in 1975 were very different from the skill sets needed today. If the workforce today had 1975 skills, we could not be successful.

So we took an initial look at the skills we developed in the 1970s—sheet metal mechanics, hydraulic mechanics, basic electronic maintenance technicians, back shop work on flaps and slats, and so on. But how many people did we have in 1975 who were software technicians or software engineers and were knowledgeable on digital electronic warfare systems as well as global-positioning-system-driven capabilities? Not very many. We examined workforce changes in 1985, 1995, 2005, and then started thinking into the future in 10-year increments.

If you look into the future at the workforce—not the number of people, but the composition of the workforce—it leads you to certain conclusions. Then you start to populate that workforce by looking at the kind of airplanes and other systems we support today: the C-17, the F-22, a much-modernized C-5 with updated avionics and engines, not to mention avionics upgrades on old workhorses like the C-130.

From there, we established a better foundation for our requirements and projected skill needs to support future

technologies. With this information in hand, we partnered with the wonderful communities here in Georgia to communicate our workforce skill needs for the future—both technical and professional. If we know we will need to double our hiring of software engineers in two to four years, we can't communicate that in the spring and expect local colleges to deliver trained graduates instantly, or even next year. We need to project workforce requirements years in advance to allow time for the secondary schools, colleges, and universities to develop those individuals.

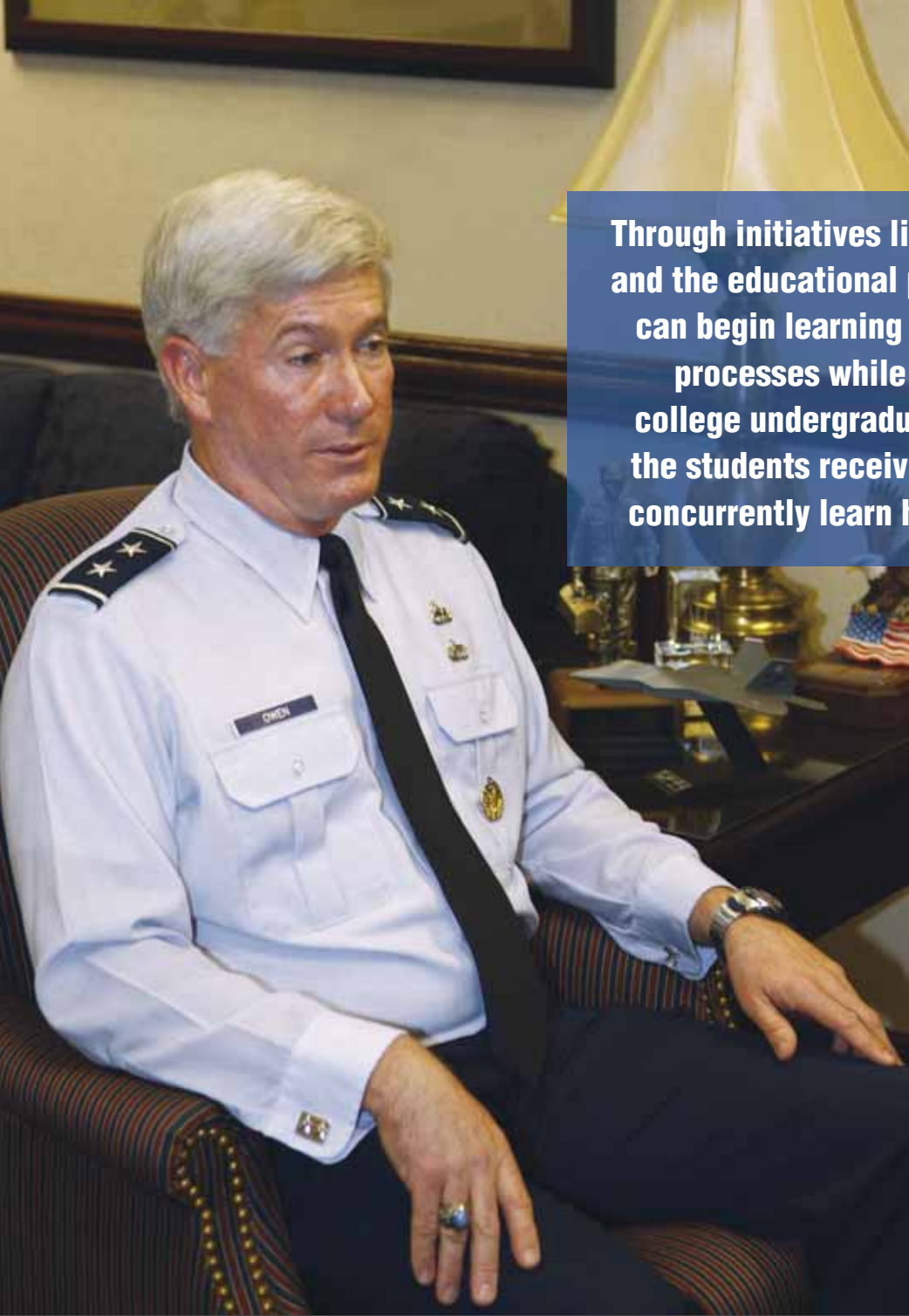
A great example of how we are addressing our workforce challenge is in contracting. Our director of contracting, Patsy Reeves, told me about a year ago that we would need to double the number of contracting personnel at Robins Air Force Base in the next few years to accommodate the new workload scheduled to relocate here. To meet that challenge, we are proactively partnering with local colleges to initiate programs that will provide the trained workforce pipeline we will need to meet future mission requirements.

Q *A challenge currently facing the Department of Defense is the aging of the workforce. How does this challenge affect Warner Robins Air Logistics Center specifically, and how is the center proactively working to address this challenge? What type(s) of succession plans are being made to ensure that future leaders are developed?*

A My personnel experts tell me that in the next five years, 40 percent of the workforce at Robins AFB will be eligible to retire. That's a startling statistic, but I balance my concern with the realization that many civil servants choose to work beyond their retirement eligibility date. Every few months, I sign several certificates for 40 and even 50 years of service. Likewise, as I look around the base, I have a relatively balanced workforce in terms of age. We have young people, middle-aged employees, and we have some people like me who have white hair. So while I take seriously the civil service retirements on the horizon, we are working hard to maintain an age balance.

In fact, 46 percent of the civilian employees here at ALC today have less than 10 years of service. That's pretty impressive. Seventeen percent have between 11 and 20 years; 30 percent have between 21 and 30 years of service; and 6 percent have over 30 years with the government. That's a pretty balanced workforce. While the 40 percent eligible to retire is an accurate statistic, I know not all who are eligible will choose to retire.

Even with a fairly balanced workforce at Robins, we must look to the future needs of the aerospace career field and the right skill sets, not only for Robins, but also for indus-



Through initiatives like our co-op program and the educational partnership, students can begin learning federal government processes while completing their college undergraduate work. This way, the students receive college credit and concurrently learn how we do business.

est in aerospace is lost. Today, there are thousands of children who have attended college and technical school and are benefiting from their past experiences at the Museum of Aviation.

Looking further into the future, Robins' personnel and training team recently hosted the Middle Georgia Work-Ready Aerospace Partnership (mgWRAP) Solutions Summit here at Robins. Over 100 leaders from industry, education, government, and community organizations attended. This summit was a major step in a regional initiative that focused on Middle Georgia's aerospace workforce and served as a call to action to develop future aerospace workers for the region's employers with the skill sets needed for our future challenges. Summit participants put the emphasis on educational

try. Let me start with our youngest potential recruits and the great partnership we have with the Warner Robins community that allows us to capture student interest in base employment. It starts with the Museum of Aviation and the fantastic experiences this team of educators provide in their K-12 programs. In the last year, the museum logged more than 126,000 hours of contact time, educating more than 45,000 students. These hours include tours; practical experiences; and classroom time, in which students learn about science, math, and aerospace applications. And why do we do all this? Because if you wait until college, the opportunity to capture a student's inter-

programs to fill the pipeline with well-prepared students to replenish the aerospace workforce.

We already have multiple co-op and intern programs that expose high school and college students to the base and introduce them to the great career opportunities available here. We actively recruit in engineering, finance, contracting, and acquisition management. One innovative educational partnership we've established with Macon State College, the Aerospace Industry Committee, and the Defense Acquisition University (DAU) allows college undergraduates to complete three government contracting and Ac-

quisition Professional Development Program electives to develop ready-to-work contracting professionals. Likewise, we also have partnerships with seven technical colleges in Georgia and one in Alabama. Through a complex system of forecasting, we're able to let them know, "We're not doing as much sheet metal work these days as we were back in the 1980s. We're doing more high-tech material work, so we need you to expand your course offerings in that area." In addition, we have a new summer science and engineering intern program to expose engineering students to exciting aerospace career opportunities.

That's just the top-level look, but it is exciting to see the end-to-end programs we are creating with the community to reach students of all ages and those ready to be hired, and the continuing education and training once people are part of the workforce.

You asked about succession plans for developing future leaders. Dr. Steve Butler, my center executive director, chairs a senior leader team focused precisely on that goal. We fill mid- to senior-level leader vacancies throughout ALC as local career-broadening opportunities. This process re-aligns leaders into new career fields to give them a broader strategic perspective to prepare them to assume greater responsibility in the future.

Q *Not only does the Department of Defense face the challenge of an aging workforce, but it also faces difficulties in retention, and there is a dramatic shift in skill sets needed throughout the department. How does this affect Warner Robins Air Logistics Center, and how is the center proactively working to address these items?*

A We work hard to hire the right people, but once they are here, we also need to make sure we can retain them. There are a couple of principles that I believe are key. First, we must continue to let people know that what they are doing is very important, and when they go home at night, they know they are part of defending our nation.

The Air Force refers to all people employed by the Air Force as airmen. I held a commander's conference a few months ago and let our people know that I consider them all to be airmen, whether they wear a uniform or civilian clothes. When employees understand that what they are doing is vitally important to the security of our nation, they will find more meaning and satisfac-

tion in their job and tend to think twice before they go somewhere else.

In addition, we need to ensure we have good developmental programs for our people and that we provide the right education and training. I came into the Air Force in 1974 as a U.S. Air Force Academy cadet, and my training was pretty good for the time. The Air Force has continued to invest in my education and training to help me be more effective facing the challenges of 2008. The same principle applies for the rest of the workforce. All employee skills need to be updated for today's job requirements. We are forming continuing education programs through our DAU partnerships at Macon State College; as well as the expanded Acquisition Professional Development

Program curriculum offered through the local DAU satellite campus, which was established

thanks to the efforts of Frank Anderson [*president of DAU*] and Pat Hogan [*chief, Acquisition Career Management and Resources Division, Office of the Assistant Secretary of the Air Force for Acquisition*].

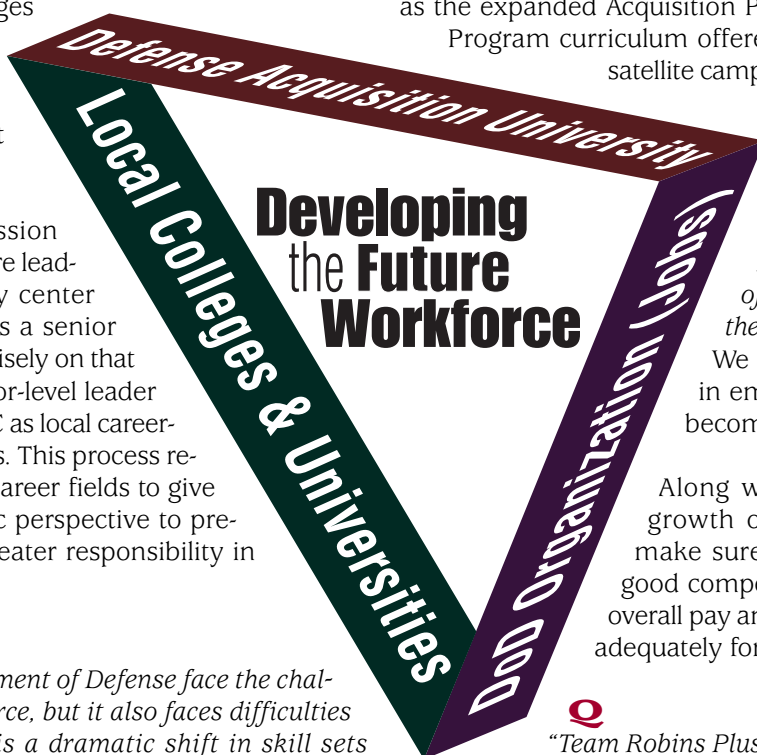
We find that when we invest in employee growth, retention becomes less of an issue.

Along with job satisfaction and growth opportunity, we need to make sure that our people have a good compensation package so their overall pay and compensation provides adequately for their needs.

Q *"Team Robins Plus" is often used to describe the community surrounding Warner Robins. Can you describe some ways you have supported and fostered this relationship?*

A Warner Robins and all of middle Georgia is blessed to have some of the most patriotic Americans anywhere. Since the founding of the base in the 1940s, middle Georgia residents have been great partners with this installation. Warner Robins, Ga., was originally called Wellston. The town agreed to change its name to Warner Robins at the request of the first base commander, Col. Charles E. Thomas. Col. Thomas' mentor was Brig. Gen. Augustine Warner Robins, and the colonel asked that the town name be changed so the base could also be named in honor of his mentor.

That initial community support for the installation is even stronger today. Indicative of that support is the Middle



Maj. Gen. Thomas J. Owen, USAF

Former Commander, Warner Robins Air Logistics Center

Maj. Gen. Thomas J. Owen is the former commander of Warner Robins Air Logistics Center, Air Force Materiel Command, Robins Air Force Base, Ga. He was responsible for worldwide logistics support for C-130 and C-5 transport aircraft, F-15 fighters, and U-2 reconnaissance aircraft as well as support for remotely piloted vehicles; Air Force helicopters; air-to-air missiles; surface motor vehicles; and high-technology airborne electronics, avionics, and electronic warfare requirements. He also oversaw comprehensive logistics support and sustainment of the E-8C Joint STARS and the C-17 transport aircraft. Warner Robins Air Logistics Center is one of three Air Force air logistics centers and the largest single-site industrial complex in the state of Georgia.



Owen entered the Air Force in 1978 as a graduate of the U.S. Air Force Academy. Early in his career, he worked on the B-52 Stratofortress and the KC-135 Stratotanker aircraft and later served as an F-15 Eagle maintenance supervisor. He has commanded an aircraft generation squadron maintaining F-16 Fighting Falcon and OA-10 Thunderbolt II aircraft; a maintenance squadron performing intermediate-level aircraft and munitions maintenance; and a combat logistics support squadron providing F-16 and F-4 Phantom aircraft battle damage repair, supply, and transportation support.

Owen was the first logistics group commander for the first and only wing operating the E-8C Joint STARS aircraft. For more than three years, he was director of the C-5 System Program Office at the San Antonio Air Logistics Center and Warner Robins Air Logistics Center. He has also served as director for the C-17 System Program Office and F-22A System Program Office, Aeronautical Systems Center, Wright-Patterson Air Force Base, Ohio. Prior to becoming Commander of Warner Robins ALC, he was director of logistics, installations, and mission support at Headquarters, Air Education and Training Command.

Owen is currently serving as the director of logistics and sustainment, Headquarters, Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio.

Georgia Military Affairs Committee, which is an organization representing each of the 15 Chambers of Commerce in middle Georgia. Each individual Chamber of Commerce has a committee focused on ways to effectively partner with Robins AFB and ALC.

We have another group, the 21st Century Partnership, which is an independent organization of community supporters from a seven-county area surrounding the base. This group seeks out opportunities to support the base, such as providing a 21st Century Team Quality Award to recognize excellence and efficiency. Regularly, they ask for suggestions on how to recognize the efforts of the great men and women who work at Robins.

Q Can you talk about the recently formed partnership between Warner Robins, Macon State College, the Aerospace Industry Committee, and DAU? What are the benefits of the partnership, and what makes it so unique?

A The partnership formed with Macon State College, the Aerospace Industry Committee, and DAU has really been an exciting transformational initiative. While it is transformational, it is also very simple and makes us wonder why we haven't operated this way all along.

For years, local students attended college, specialized in a specific curriculum, then were hired by the base. At that point, we would tell them, "OK, you've learned the academic way in college, but the federal government does business by a unique set of rules." After they were hired, the process of teaching newly hired employees those unique laws and regulations and gaining expertise in their application would take five to six years.

Through initiatives like our co-op program and the educational partnership, students can begin learning federal government processes while completing their college undergraduate work. This way, the students receive college credit and concurrently learn how we do business. When they come to work on a permanent basis at Robins Air Force Base, they will be able to take on more responsibility much more quickly, shortening the lead time to produce proficient experienced employees.

This educational partnership could have happened only through cooperation between DAU, the Aerospace Industry Committee, Macon State College, and the base. While the trained graduates it produces



my purpose wasn't solely to fix airplanes, but also to help my people gain the skills to do their jobs well. Even today, I see my job is to give people four specific things: the time, the tools, the training, and the technical data/information necessary to tackle the challenges they are given.

As I progressed in my career and transitioned into program management assignments, I found out that the same principles apply when running an Aircraft System Program Office. Now that I command an ALC, these same principles still apply. I need to give my people those four enablers so they can get the job done.

If we take care of the people—through recruiting, retention, and rewarding performance—then they will, in fact, get the job done, and the mission will be successfully accomplished.

will greatly benefit ALC and Robins AFB, there are also advantages for our industry partners. Defense industry employees need familiarity with federal government contracting processes, and the college electives we are developing are also available to their employees. Having a common understanding of the rules and processes governing our business can only help us to have more effective partnerships.

Q *Many leaders throughout the acquisition community are looking at the challenges in the workforce and wondering what initiatives make the most sense. What do you recommend leaders need to do when it comes to developing the future workforce?*

A I've had a philosophy for years that I learned as a young Air Force maintenance officer. I realized back then that

When I arrived at Robins AFB in 2006 as the commander, I was so pleased to learn that the center operated on a foundational principle: "People First, Mission Always." I continue to endorse those priorities, and we operate that way today. If we take care of the people—through recruiting, retention, and rewarding performance—then they will, in fact, get the job done, and the mission will be successfully accomplished.

We're always looking forward toward how we need to adapt and improve in the future. As the commander of Warner Robins ALC, it is so heartwarming to see a workforce attitude, from entry-level employees to those who report directly to me, constantly striving to improve. This, I think, is our best practice—complete employee involvement in transformation and improving the ways we accomplish our jobs. We call it AFSO21—Air Force Smart Operations for the 21st Century.

Q *Thank you for your time, Maj. Gen. Owen.*

Contracting Workforce Development

How Warner Robins Air Logistics Center is Shaping its Future

Patsy J. Reeves, Former Contracting Director, Warner Robins Air Logistics Center

Contracting, like many other acquisition career fields, faces many challenges today. The workload has skyrocketed over the last decade because of expanding Department of Defense requirements for supplies and services. Also, contracting laws and regulations have become increasingly complex. At the same time, DoD budget challenges have downsized the acquisition workforce, and many seasoned contracting professionals are nearing retirement. This confluence of multiple workplace challenges

demands innovative strategies to recruit and train the next generation. Patsy Reeves, then contracting director at Warner Robins Air Logistics Center, talked to *Defense AT&L* in March 2008 about ways the center is addressing these challenges.

Q Can you describe how contracting teams support the Warner Robins mission? What are some of the biggest challenges you've faced in the last few years?

A During fiscal year 2007, the 350 contracting professionals at Robins Air Force Base awarded 14,454 contract actions worth \$4.7 billion. These contracts support the C-17, C-5, C-130, F-15, U-2, Joint Stars, and special operations forces

With the imminent retirement of many seasoned contracting professionals, it is imperative that we recruit top-notch talent and find creative ways to accelerate their training. We just don't have the luxury of five to seven years to develop future contracting officers.



Photos by Gary Cutrell, Robins AFB



**The Air Force
can now hire students
who have completed the
government-unique contract
courses, saving time and
money and creating an
established pipeline for
hiring new contracting
employees.**

aircraft. We also purchased avionics, electronic warfare, test equipment, armament and support equipment systems, supply chain parts, and services. In addition to the current workload, last September, the secretary of the Air Force announced plans to regionalize operational contracting. Over the next two years, Warner Robins will become the hub for consolidated purchasing for 11 Air Force bases in the southeast United States. This new mission will add an additional 350 military and civilian contracting employees at Robins Air Force Base.

Over the last five years, our contracting organization has faced a twofold challenge—annual contract obligations have significantly increased while our workforce has decreased by 20 percent. To succeed in the face of these challenges, it has been essential to find smarter business approaches to get the job done and, at the same time, devise new ways to recruit and grow future contracting leaders.

Q

The Baby Boomer generation employees are retiring, and new Robins Air Force Base mission demands require additional workforce members. How are you preparing for the influx of inexperienced workers who will enter the contracting workforce?

A

Because contracting officers are entrusted to wisely spend millions of taxpayer dollars, the law requires them to have an undergraduate college degree, 24 hours of business academic courses, and 10 specialized DoD contracting training classes. Historically, it has also required five to seven years of hands-on negotiation experience to develop a warranted contracting officer. With the imminent retirement of many seasoned contracting professionals,

it is imperative that we recruit top-notch talent and find creative ways to accelerate their training. We just don't have the luxury of five to seven years to develop future contracting officers.

At Warner Robins, we've made next-generation workforce development part of everyone's responsibility. It's becoming part of our culture. Developing the workforce is, in many ways, like parenting children. Parents who focus little time and effort on raising their children will likely produce poorly developed adults. On the other hand, parents who provide their children with good role models, growth experiences, and lots of coaching are more likely to raise responsible adults. We believe it is well worth the investment of our time and energy to recruit the very best talent and then provide them increasingly challenging work with mentoring oversight.

Q

The Macon State educational partnership with Warner Robins Air Force Base is highly touted as an example to emulate across DoD. Can you explain how this partnership works and why it is so exceptional?

A

The Macon State partnership started with the quest to reduce the amount of time—five to seven years—it takes employees to become proficient in federal government contracting. While an academic degree that includes business courses provides a strong foundation, somehow we had to find a way to accelerate the time required for new employees to become skilled in contracting. Our educational partnership started with the idea of creating a single college undergraduate elective in contracting so graduates we later hired would have a fundamental understanding of contracting principles. But I was thinking way too

small, and brainstorming the possibilities with our Warner Robins Defense Acquisition University satellite campus manager, Debbie Johnson, caused the initial concept to blossom into a multiple-course concept. We approached Barbara Frizzell, Macon State College vice president of academic affairs, to see if our concept was feasible. Through several months of discussions and curriculum reviews, and through learning the jargon of each other's respective institutions, the initiative evolved into three undergraduate electives available to students majoring in general business, management, or marketing. These courses—Principles of Contracting, Contract Evaluation and Award, and Contract Pricing—along with other business prerequisites would incorporate DAU-required level I and II course material and be taught by college adjunct professors who are also contracting leaders on the base. Our goal was to seek DAU level I and II contracting course equivalency so students gain that essential understanding of government-unique contracting principles before they are hired. This shift in training responsibility is projected to save the government up to 12 weeks of classroom and online time and \$14,000 per student.

What makes this concept so attractive is it creates a win-win proposition for all involved. The Air Force can now hire students who have completed the government-unique contract courses, saving time and money and creating an established pipeline for hiring new contracting employees. The college benefits by attracting additional students and then providing clear opportunities for post-graduation employment. DAU gains the opportunity to shift valuable instructor and classroom time to other students and other academic needs. This concept model can also be applied to other acquisition career fields with the same benefits. Another plus is the growth opportunity provided to senior contracting leaders who are serving as adjunct professors at the college level for the first time.

Several years ago, we started a contracting college co-op [*cooperative education*] program, allowing college juniors and seniors the opportunity to work on the base 20 to 32 hours a week for up to two years before they graduate. This co-op program gives them hands-on experience in contracting and allows both the students and us as the employer to assess if a particular student will succeed in contracting. What excites me is the possibility that co-op students who also complete the nine hours of government contracting courses may be able to qualify for contracting officer warrants several years sooner because of the academic and practical knowledge they gain while still in college. So the combination of smart recruiting and training initiatives can compress the time required to develop future contracting officers.



Can you tell us about the outside interest and the spin-off benefits of the educational partnership?



It has been very exciting to see this partnership take on a life of its own—and one we never envisioned. When the concept was under discussion, Macon State indicated that a minimum enrollment of 12 students was necessary to break even financially. To encourage additional enrollment, we shared the concept with local defense industry representatives. To function best in their jobs, defense contractors need an awareness of the principles of government contracting. Last December, when registration opened for the January 2008 semester, we waited with baited breath to see if our local communication campaign would generate sufficient students. We were hoping for 12 students, and when 20 or 25 students registered for the class, Macon State decided to move the Principles of Contracting course to a larger classroom. Ultimately 30 students completed the first class in May, and all three classes are being offered during the summer 2008 session. So the response has been exceptional, and 39 students are enrolled for the summer 2008 classes!

We've had the opportunity to brief the educational partnership many times, both locally and to contracting groups at other locations. Several communities have expressed interest in replicating the concept, and they call or visit us to seek advice and lessons learned. It has been very exciting to receive inquiries from DoD organizations, particularly when we have no idea how they learned about the initiative.

Recently, Macon State College received a grant from the State of Georgia to expand and enhance our educational partnership. The state is very interested in encouraging market-based academics in state colleges and universities to meet the educational needs of major employers in surrounding communities. Warner Robins Air Force Base, as the largest industrial employer in the state of Georgia, certainly qualifies as a major employer.



You've been involved in a contracting training service called PK University. Can you talk about that and how it has benefited Warner Robins?



PK University is a simple concept to organize and communicate local contracting training opportunities. I learned about the concept at another Air Force base, and we've adopted and grown the idea at Robins. Because contracting is a highly regulated career field, we're always conducting training classes on a wide variety of topics. In the past, these training opportunities were advertised through just-in-time e-mails giving notification of an upcoming class. PK University establishes an online annual training catalog—similar to a college catalog. In this course catalog, we list over 50 courses that are available throughout the

year, providing course descriptions and projected training schedules.

So, for example, if I am assigned as the buyer on an upcoming source selection and this is new and unfamiliar work, I can go to my personal computer and click on PK University to find out when classroom training will be offered. If I need this expertise before a class is offered, there are links to other sources of online training, including the DAU continuous learning modules.

PK University at Robins has expanded its original offerings and now includes training provided by our small business advisors, the legal staff, and our source selection experts in the Acquisition Center of Excellence. PK University is a simple concept to heighten training awareness and make classes and online resources more available. Several other contracting organizations at other bases use PK University and our training rather than duplicate the concept at their location. We were very proud when PK University was designated an under secretary of defense for acquisition, technology and logistics workforce development best practice in 2006.

Q Another contracting training service you've been involved in is the development of specializing pricing training. Can you talk a bit about that?

A Contract pricing is an area of specialized expertise that is very critical because it is central to ensuring we pay fair and reasonable prices for the supplies and services we purchase. To help bolster the pricing expertise of our workforce, we established a three-day, hands-on pricing course. Two weeks prior to the course start date, students receive a contractor proposal and are required to become familiar with the material before the class begins. During the two-day training, experienced price analysts guide the class through preparing a proposal spreadsheet in a Microsoft® Excel database and develop the government price objective. They are given sample DCAA [Defense Contract Audit Agency] reports, DCMA [Defense Contract Management Agency] recommendations, and a technical evaluation. Using all this expertise, the students develop the pre-negotiation price objective. Then the class divides in two. Half the class takes the role of the contractor and the other half assumes the role of the government negotiation team, and they conduct a mock negotiation.

**[New professionals]
learn the right way,
from the start,
and know whom
to call for advice
in the future
when technical
challenges arise.**



These negotiations can get very intense. Coached through this entire process by experienced price analysts, the students complete the experience by writing a price negotiation memorandum to document the negotiation and explain why the price is fair and reasonable. Our pricing experts have also created an online electronic template to streamline the documentation process. In a two-day period, someone inexperienced in contract pricing learns about and creates spreadsheets, uses weighted guidelines to develop supportable profit objectives, gains experience in negotiation techniques, and completes the contract file documentation.

Q What other successful Warner Robins contracting programs can you tell us about?

A JUMPSTART is a training approach with an interesting beginning. Several years ago, we were fortunate to hire 17 people who were scheduled to start to work in the beginning of August. In contracting, August and September are the busiest time—we are in a full-court press to get last minute requirements on contract before funds expire at the end of the fiscal year. August and September are the worst months to introduce new trainees into the workplace because no one has the time to focus on their training. Our training director approached me and said, “Mrs. Reeves, could we keep the new trainees in the home office for a few weeks and teach them the basics of contracting?” Everyone thought this was a wonderful way to optimize the first few weeks of their contracting career. And so JUMPSTART was created.

While the length and format can be very flexible, JUMPSTART currently provides 12 to 14 weeks of continuous

SPECIAL ANNOUNCEMENT!

IT'S ABOUT THE PEOPLE

"I frequently view the work of the acquisition team as paving a path, one brick at a time, that will provide us with the means to strike anyone, anywhere, and at any time. You can't just lay one brick—and each member of the team has a chance each day to lay new bricks. You have to lay a lot of bricks—ships, planes, weapons, sensors, communications, and networks that connect everything, and more importantly, change how we do business. The result is we, together, pave a path that represents a superhighway to the future."

~JOHN YOUNG

Under Secretary of Defense for Acquisition, Technology and Logistics



Mr. Young identified four strategic thrusts that outline the direction the defense acquisition workforce needs to take. Strategic Thrust 3 is "Take Care of Our People." The guiding principal behind that thrust is that the AT&L team will operate as a neighborhood, collaborating and developing people to strengthen the community

A great deal is being expected of the AT&L team. The team must:

- Equip all with the skills they need to be successful and work together across the AT&L workforce
- Collaborate to achieve enduring results
- Provide a work environment that allows all to participate productively; one that is free from harassment, discrimination, and unethical behavior
- Ensure we act as unbiased government representatives in evaluating all courses of action and proposals
- Constantly attack regulations and bureaucratic impediments in order to more effectively and efficiently deliver value for the warfighter
- Recruit and hire the best and brightest to learn and lead in the future
- Reward people who make a difference and perform beyond their job description

How will the team do this?

- Establish the Defense Acquisition University Living Library to collect lectures on program management experiences and lessons learned
- Institute a comprehensive workforce analysis and decision-making capability
- Implement a rotational assignment plan for senior executives and developing leaders
- Apply executive coaching and 360° feedback processes to improve the organization
- Review and implement changes to our hiring practices to make the government hiring timely and competitive
- Seek to change things to more effectively and efficiently deliver value for the warfighter and the taxpayer

For further information, please see the USD(AT&L) Strategic Plan version 2.0, located at www.acq.osd.mil/goals/20080207_SGIP.pdf.



Our goal is to seek DAU level I and II contract course equivalency so students gain that essential understanding of government-unique contracting principles before they are hired.

training for new contracting employees. During that time, the class is introduced in a sequential fashion to the contract award process, with various training topics presented by the local experts. The students also gain familiarity with the contracting-unique IT systems used for contract preparation and statistical reporting. They complete level I DAU online classes with experts available to facilitate their understanding. They also gain hands-on experience in the process of turning a purchase request requirement into a contract, so they understand the fundamentals when they move into a buying office.

Besides the obvious benefit of turning their first few weeks on the job into productive learning, the trainees build relationships with each other and with the experts who teach them. They learn the right way, from the start, and know whom to call for advice in the future when technical challenges arise. At the end of JUMPSTART, we deliver ready-to-work employees to the buying organization and accelerate their effectiveness.

Q

How do you give new employees hands-on experience once they come onboard Warner Robins?

A

In contracting, knowing the technical fundamentals is critical, but much of the expertise comes from hands-on experience that is guided by a trainer or senior con-

tracting officer. That presents somewhat of a problem because with the high workload demands, mentoring newer employees becomes an extra duty. So we created workload cells grouped around the complexity of the contracting requirements processed. Trainees usually start out in a four-person cube, with two other new contracting employees and an experienced contracting officer. Beginning with simplified acquisitions, the three trainees learn together and benefit from the questions and challenges each of them encounters. Once beginning trainees master simplified purchases, they physically move to another four-person cubicle and work with another trainer to gain experience at the next level of buying complexity. There's a little healthy peer pressure here because no one wants to be left behind as his or her peers graduate to the next level. The last stage in this rotation process is the source selection cell, in which buyers learn the fundamentals of conducting best-value source selections. Right now, there are 34 source selections in process in this area. Once trainees learn these fundamentals, they move to the other buying offices responsible for our more complex acquisitions. It's very energizing to visit these contracting trainee groups. They work hard and play hard and build strong bonds as they learn the contracting business. Their enthusiasm is contagious.

Q

Thank you for your time, Mrs. Reeves.

A Different Kind of Force Development

***The Educational Partnership of
Warner Robins Air Logistics Center, Macon State College,
the Defense Acquisition University,
and the Aerospace Industry Committee***



From left to right are Lisa Corr, Christine Clark, Debbie Johnson, Mickie Cranford, and Deborah Hall. Photos by Gary Cutrell, Robins AFB

The acquisition career workforce is constantly changing. The pace is increased, resources have been reduced, and the use of electronic acquisitions is developing a global acquisition workforce. The Department of Defense must ensure tomorrow's acquisition professionals are ready for the challenges to come. Warner Robins Air Logistics Center is preparing for its acquisition future through the recent development of an innovative educational partnership with Macon State College (MSC), the Defense Acquisition University (DAU), and the Aerospace Industry Committee of the Warner Robins Chamber of Commerce. The partnership initiative, conceived by Warner Robins ALC Director of Contracting Patsy Reeves, shifts educational responsibility for contracting fundamentals from after hiring to before hiring. The partnership has been a win-win for multiple stakeholders by creating a potential recruiting pipeline to accelerate contracting workforce development

for individuals pursuing a career in the federal sector. In addition, the partnership offers individuals in the private sector the opportunity to learn about the intricacies of government contracting. The impetus for developing the partnership focused on DoD's need to prepare and deliver ready-to-work contracting employees.

So, how'd they do it? In March 2008, *Defense AT&L* talked with the team members that developed and implemented the educational partnership. Those interviewed were:

- Mickie Cranford, chief, ALC C-130 Contracting Division and MSC adjunct instructor
- Christine Clark, chief, Policy and Review Branch, Contracting Directorate, ALC
- Deborah Hall, chief, Force Development and Analysis Branch, ALC
- Debbie Johnson, DAU site manager, Warner Robins

- Lisa Corr, source selection advisor, Pricing, Plans, and Programs Office, ALC
- John Cole, interim dean, School of Business, MSC
- Tim Callahan, chairman, Aerospace Industry Committee of the Warner Robins Area Chamber of Commerce

Note: Partnership team member and ALC price analyst Dick Arrington was not available for this interview.

Q *Ms. Hall, what drove you to start thinking about partnering with Macon State?*

Hall

With the contracting career field Baby Boomer generation closing in on retirement in the next five to 10 years, coupled with today's contracting environment, which is very different from the past, it is imperative to deliver ready-to-work employees to the contracting career field. We realized that we must compress the five to seven years that used to be required to develop a warranted contracting officer. The idea was to partner with a local college to develop a contracting curriculum that offered college

in future federal employment, so the courses were developed to be of interest to both public and private industry. An added benefit was the estimated government training cost avoidance of \$14,000 per student.

Q *Ms. Hall, what were some of the first steps you took when developing the educational partnership? Can you describe some of the roles that needed to be assumed and the discussions that were held that made this partnership a reality?*

Hall

The initial partnership meeting took place in late December 2006 between Patsy Reeves and Barbara Frizzell, vice president of academic affairs at MSC. The two leaders discussed the contracting curriculum concept and committed their support to ensure the success of the partnership. With the support of Maj. Gen. Thomas J. Owen, Warner Robins ALC commander; David A. Bell, president of MSC; Frank Anderson, DAU president; and Tim Callahan, chairman, Aerospace Industry Committee of the Warner Robins Area Chamber of Commerce, a small team of Robins and MSC experts turned the educational partnership concept into reality.

For a successful partnership, we had to get the right people with the subject matter expertise on the partnership team. After meeting with Mrs. Reeves and the MSC faculty and administrators, the next step was to contact our DAU site manager, Debbie Johnson. Ms. Johnson was asked to be a core part of our educational partnership team—it was critical to put a team together to develop contracting courses with subject matter experts to help turn the partnership into a reality. The Robins team expanded to include the expertise of ALC Contract Policy



With the contracting career field Baby Boomer generation closing in on retirement in the next five to 10 years coupled with today's contracting environment, which is very different from the past, it is imperative to deliver ready-to-work employees to the contracting career field.

—Deborah Hall

undergraduate students fundamental contracting courses to prepare them as potential employees and bring them on board as ready-to-work employees. We didn't want to limit the contracting curriculum to individuals interested

Chief Christine Clark, along with Dick Arrington, a veteran price analyst. This team began comparing, reviewing, and cross-referencing MSC business courses with DAU contracting courses to identify duplications, omissions, etc.,

to create pure contracting courses. As this work evolved, two additional ALC subject matter experts completed the Robins core team: Mickie Cranford, C-130 contracting division chief; and Lisa Corr, source selection advisor for pricing, plans, and programs. The team began reviewing MSC's existing undergraduate business curriculum and DAU courses, and they collectively developed course objectives and outlines. Those individuals developed the three contracting courses—Principles of Contracting, Con-

development program certification after completing the required on-the-job hours.

As the educational partnership coordinator, I managed the daily activities of the partnership, served as the liaison between all parties, and authored the partnership memorandum of understanding.

Q

Ms. Johnson, can you talk about your role in this partnership?

Johnson

When I first came to Robins in the fall of 2006, Patsy Reeves approached me on ways to position her contracting workforce for the future. After I listened to some of her challenges—attrition, Baby Boomers soon retiring, and the length of time to develop a contracting officer—I introduced the idea of equivalency. By that, I mean a college degree focusing on contracting, equivalent to the DAU course material, thus meeting the DAWIA level I and level II certification requirements, which could provide a



[The academic partnership is] an opportunity to transform how we do business.

—Debbie Johnson



tract Evaluation and Award, and Contract Pricing. The courses are the equivalent of nine semester hours at MSC. Less than 12 months later, the first contracting course, Principles of Contracting, was offered, and 30 students recently completed it.

Three classes offered at MSC are part of a contracting curriculum anticipating the fulfillment of the Defense Acquisition Workforce Improvement Act [DAWIA] certification requirements for a federal government career in contracting. The three contracting electives plus other business prerequisites replace 10 DAU training classes. Students subsequently hired for ALC contracting positions will be eligible for level I and level II acquisition professional

pipeline into the contracting workforce. This would allow new employees to enter the government workforce at a much higher level of contracting knowledge and position them for future acquisition challenges. It's an opportunity to transform how we do business.

Q

Mr. Cole, could you tell us a little bit about the courses that resulted from the educational partnership?

Cole

Essentially, 10 DAU contracting courses plus prerequisites have been turned into three MSC courses that can be taken for college credit. This isn't on-the-job training, and

it's not just continuing education—these are college credit courses developed specifically for this partnership.

Initially, we came up with a sequence of three courses, with plans to offer the first in the spring semester, the second course the following fall, and then the third course the following spring. This matches up with a college junior moving into his or her senior year up to a graduation. We originally had a classroom assigned for 24 seats, and then we had to move to a larger classroom because we

Regarding the educational partnership, the Aerospace Industry Committee's role is primarily to promote and advertise the program and its advantages. Eventually, we can assist in recruiting students for the program. We believe it's a great opportunity to help the base with its workforce challenges. We also view it as a positive initiative for the aerospace industry. The students who go through this program will likely be the government acquisition officials



We looked at the course development through an acquisition process flow.
—Christine Clark



ended up with 30 students. We announced the program in October [2007] and started in January [*of this year*]*—*already with an overflow crowd*—*and we've accelerated the sequence of courses to accommodate that demand. We'll now offer the second and third courses simultaneously this summer, so we will be a full school year ahead of schedule with our first students completing this curriculum.

Q *Mr. Callahan, could you explain the function of the Chamber of Commerce Aerospace Industry Committee and its present role in this education partnership?*

Callahan

The Warner Robins Aerospace Industry Committee is composed of approximately 100 defense-related companies in the local area. It is a fairly large organization that represents the defense industry in the Warner Robins area and supports the mission of ALC and Robins AFB. We view it as enlightened self-interest to support the base and its multiple initiatives to become more efficient and to increase its contributions to our national security posture. When there are upcoming acquisitions, our members participate in industry days. Monthly luncheons with leaders from ALC give us a snapshot of what's going on in their respective wings or functional areas and what challenges they're facing. This, in turn, assists industry in determining what we can do to help accomplish the mission.

with whom we interface in the future, or perhaps new employees of our own.

Q *Ms. Johnson, as the DAU site manager, what were the challenges you faced in bringing partnership to fruition?*

Johnson

The challenge was meeting the customer's need—the ability to hire college graduates who already had contracting knowledge—within the present Macon State curriculum, which provides for a business and information technology degree with a major in accounting, management, marketing, or general business. We immediately realized only the major tracks of management, marketing, or general business would allow for a concentration in contracting. The team reviewed the present MSC courses and the DAWIA training to see how both sets of curriculum might be combined as a package to meet the DAWIA requirements. After the review, the team was able to leverage off of the

present MSC curriculum in pursuit of the DAU level I and level II equivalency.

Q

Ms. Clark, Macon State offers three courses that tie in to DoD contracting-related courses. How did the team come to the decision to develop just those three particular courses?

Clark

At Robins, we've been really strong in training new employees. What we have done locally is look at training from an overall contracting process—from the acquisition planning phase all the way through post-award. Our local training process has been adopted by the AFMC [Air Force Materiel Command]. When we established the three courses, we borrowed the existing process flow training topics from the AFMC training modules. The modules are succinct material that could stand alone so the new employees or the students could have organized lessons. For instance, the Macon State course, Principles of Contracting—it's really about teaching the beginning of our contracting process. Then there's the Contract Evaluation and Award course, and of course, Contract Pricing is a major fundamental concept. So we looked at the course development through an acquisition process flow.

Q

Ms. Cranford, can you talk about how this partnership is different from how the current workforce learns materials,

and can you discuss how this might impact the efficiency of the contracting workforce?

Cranford

The current workforce learns through numerous training classes and on-the-job training. They have mentors or trainers who show them, "Here's what you do." The current workforce went through a lot of textbook training early in their career. This offers a different opportunity. For each topic, we divided the material into modules, explaining the flow throughout the contracting process. For specific modules, I bring guest speakers into the classroom, allowing the students an opportunity to ask those individuals job-specific questions. These students didn't know what a contract was—we're starting from the very basics. They're tying the concepts together and they're tying together the materials we're presenting with what they'll be applying later in the workforce setting, whether it's government or industry.

Q

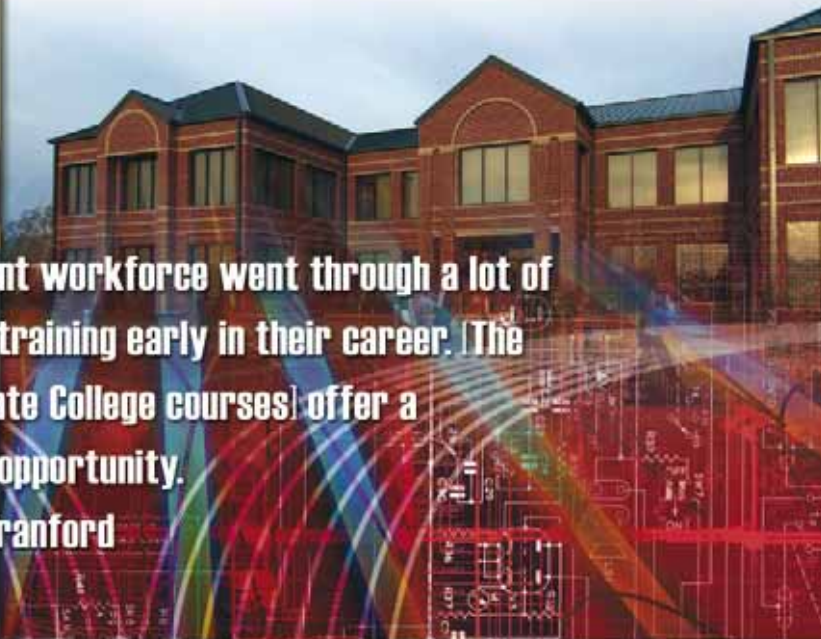
Ms. Corr, there has been great emphasis on the need to make sure DoD has the right pricing skills and competencies in the defense acquisition workforce. As the person responsible for the pricing curriculum and content, can you share with us some of the things that you've been doing and the content of the courses?

Corr

We are working with DAU on developing these courses—there are 10 DAU courses that we're pulling information from and developing three with MSC. I'm working on the third course, Contract Pricing. In some ways, the courses



The current workforce went through a lot of textbook training early in their career. The Macon State College courses offer a different opportunity.
—Mickie Cranford



overlap slightly—the previous courses will touch on pricing, but the Contract Pricing course is more in-depth on the cost analysis, price analysis, and negotiations. We are planning to do a mock negotiation toward the end of the semester. This will make the course more practical and exciting for the students.

Q

What are some of the lessons learned that you would pass on to other teams or other acquisition organizations who are in the process of doing this or may be contemplating doing this in the future?

Clark

I think structure is important. We were fortunate to have Ms. Johnson, our local DAU expert, offer us insight into how we should look at the DAU objective and DAU materials. We had to go through the steps of how we would document the material so that from the development, we could move to equivalency and then move to the individual instructors actually taking the instruction plans and using them effectively. To facilitate this, we came up with three key documents for each course—a crosswalk matrix, an instruction plan per module, and a module summary. I think this structure led to our being able to make sure that the courses can be changed and updated in an organized manner.

Cranford

One of the other things we're doing to enhance development of trainees' contracting development—and it's proven to be successful—is we've gone to experts on different modules such as small business, risk assessment, or market research. This evening, we have a guest speaker from our small business office. He'll talk about socio-economic programs. It helps the students when they hear from someone who works in the field instead of hearing everything from me. It helps break up the material and provides a different perspective. The guest speaking segments will be flexible each time we offer the course. We ask several people to participate, so the guest speakers will change from class to class. I wasn't sure how successful this would be when I first started. After all, you're asking someone to come on his or her own time, often after hours and following a long day. Everyone has been excited, and everyone wants to share what he or she does. It's been a huge success, and I would recommend a similar program for others.

Q

Ms. Cranford, I understand you are serving as an adjunct professor for these courses. Could you talk about that role?

Cranford

My role as the adjunct professor for the first contracting course, Principles of Contracting, kind of evolved. When

we first started, and I heard about the idea that we were going to offer contracting courses at Macon State in conjunction with the DAU, it was quite an exciting opportunity to say, "We're going to be able to take coursework we provide to our contracting workforce into the classroom setting for a new generation of potential employees." So when the call for volunteers came out, I put my name in the hat. As a division chief in contracting, I've had co-ops [cooperative education employees] and other trainees, and for them to get this kind of foundation is just amazing. It provides so much to the student and our workforce.

My role now—developing the curriculum and serving as an adjunct professor—allows me the opportunity to share Air Force contracting with the students. We've utilized DAU material and AFMC material. However, the courses are not just about academic-type presentations. I've tried to share personal stories or things I've gained from other team members or co-workers. For example, when discussing contract types, I share examples about specific acquisitions. I relate how we apply the course material in the real world. So it's been exciting to be able to share those kinds of stories with the students. We want them to know that it's not all paperwork. The students tell you that when they go into contracting, they want to make a difference.

Q

In addition to those seeking a career in the federal government, there are also students in class from industry or the private sector very interested in learning the things taught in these classes. Can you discuss that?

Cranford

We have students from industry. We also have students in the class who are not in contracting, but they work for Robins AFB in other disciplines such as program management. This class is helping them understand a huge piece of the puzzle in their total acquisition. They are engaged in class. They'll come in before or after class because they have a real-world question such as, "Here's what we've done. Now what does that mean?" So we walk them through that. We have some class participants who are currently working in industry. Others, as a result of this class, are marketable here at Robins AFB and also with industry throughout the country. They are gaining skills that they'll be able to use throughout their career.

Q

Mr. Cole, who are the students who have been attracted to this program?

Cole

The program is geared for an existing business student at MSC who wants to pursue contracting as an additional concentration. This first group of students of about 30 includes current Air Force employees, current MSC students,

and also a number who weren't in college before we announced the contracting concentration. Several heard about these courses by word of mouth, on the news, or by way of a press release; and they are now enrolled as non-degree-seeking students. The students are essentially a mix of young, older and more experienced, and brand-new students.

Q

Are there any standards for students to actually be hired into a position once they've been through the curriculum, or even to come into the curriculum? Also, what are the benefits for students to have attended these three classes?

Hall

Eligibility requirements for individuals pursuing a contracting position are in accordance with Office of Personnel Management standards for entry level (GS-07) positions and DoD qualification standards for GS-1102 contracting positions. This means applicants must have a bachelor's degree with 24 business semester hours in any combination of accounting, business finance, law, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management; and they must also have a 3.0 grade point average. These are the minimum requirements.

There are many benefits to this partnership, resulting in a win-win for multiple parties. If a student successfully completes the three contracting courses and is selected for employment, he or she may be eligible for an accelerated in-hire pay rate, which is about \$7,600 more than those who hire in at the usual entry level in-hire pay rate. The Air Force can save time and money because the students completing the courses gain a fundamental understanding of government contracting and report ready to work, saving the usual 12 weeks of new employee classroom and online training.

Cranford

Another benefit is to those individuals who will enter the Robins AFB workforce as trainees and co-ops. These individuals go before career boards during their training period. A co-op or a trainee will sit in front of a board of four to five senior contracting division chiefs—I sit on several of the boards—and we ask technical questions to determine if they are receiving the needed training and experience. When I'm teaching, part of the advantage to the student is when they hear, "This is important—this piece of information is the type of information that you'll be asked on a career board. It's not just data you're going to memorize and dump and never use again. These are concepts you'll use your entire career."

Q

What challenges do you see for this type of program as it continues in the future?

Cole

I think the number one factor will be attracting the right kind of and enough students in that first sequence of courses—students who see contracting as a desirable end state and who will progress through all three courses. In the first course, students can come in and shop perhaps, but with the right instructor in place and the right motivations on the part of the students, they'll get through the first course and see their way through the second and third courses.

How do we measure that? By determining how many of our graduates out of that program are working in contracting, either on the base or in the contracting community, three, four, or five years from now.

Q

Do you see this model here as being easily replicated in other communities? What are those things that have been essential to success?

Johnson

I think it's easily replicated—colleges and universities can develop their own curricula that can be certified equivalent to the DAU curriculum and can be used to meet the requirements of DAWIA. Success here at Robins, no doubt, is attributed to the strong senior leadership of Mrs. Reeves. Her exuberance, vision, and passion for workforce development exceed all others. This passion is embraced by her workforce as well, which was evident amongst all the team members. Her workforce vision enlisted MSC and Aerospace Industry Committee to form this tremendous partnership. Working with this highly motivated and passionate team was an extreme honor and pleasure.

Hall

The success of this endeavor all goes back to the incredible support that we experienced from each of the educational partnership senior leaders—Maj. Gen. Owen, Dr. Bell, Mr. Anderson, Mr. Callahan, and every team member—all stakeholders were committed to the success of this project. Mrs. Reeves was the champion for this endeavor, and she was very much involved collaborating with Dr. Frizzell.

In addition to the strong senior center leadership, industry embraced this endeavor. Led by the Aerospace Industry Committee, they marketed the educational partnership and the college courses. Several Aerospace Industry Committee members audited the Principles of Contracting course and provided recommendations from an industry perspective. This project was a Herculean effort that was created and implemented in a short period of time, and its legacy will stand the test of time.

Q

Thank you all for your time.

A Team Approach for Workforce Development

The Miami Valley Acquisition Consortium

Roland Kankey



The Miami Valley Acquisition Consortium (MVAC) is a joint academic, government, and industry partnership preparing the Miami Valley workforce for the challenges of tomorrow. (MVAC Charter)

During the summer and fall of 2002, the dean of the Defense Acquisition University Midwest Region was struggling to fulfill the organization's mission to educate and train the Department of

Defense acquisition workforce. The future of the acquisition workforce impacted both DoD and non-DoD organizations, and recognizing this, the DAU Midwest dean held a Sept. 16, 2002, meeting in which all stakeholders could discuss workforce planning.

In the process of the discussions, those of us participating in the meetings realized we all needed to work together for a solution. The problem? An acquisition workforce that was and still is facing large numbers of professionals

Kankey, the elected chairman of the Miami Valley Acquisition Consortium, is a cost analysis professor at DAU Midwest. He has nearly 40 years of government experience.

nearing retirement. How could new employees be trained and developed to replace those who would be leaving the workforce? The problem of the upcoming retirement of many trained professionals wasn't unique to DoD. The acquisition community needed and still needs to strengthen and prepare the future workforce, both for defense positions and for the commercial sector.

Seeking to address that challenge, DAU Midwest hosted follow-up meetings with stakeholders in October, November, and December of 2002. The meetings came to be known as the Miami Valley Acquisition Consortium, and have been held almost every month since January 2003. The MVAC is now approaching its sixth anniversary.

MVAC is a voluntary consortium of the DAU Midwest Region; Wright-Patterson Air Force Base, Ohio; universities who provide educational programs on base (Central Michigan University and Embry Riddle Aeronautical University); Miami Valley universities such as the University of Dayton, Wright State University, and Central State University; two Miami Valley community colleges (Clark State Community College and Sinclair Community College), and the Miami Valley Tech Prep Consortium.

State-Sponsored Development

The Miami Valley Tech Prep Consortium is one of 23 consortiums in Ohio that focus on developing high school students' interest in technical careers. Consortiums exist in every U.S. state, and each state independently manages its consortiums using national technical preparation guidelines. The consortiums sponsor technical preparation programs in high schools, seeking to draw students' interest into professions such as biotechnology, business technology, digital design, engineering, environmental engineering, and information technology. Consortiums typically align with business/professional needs in their area.

The Miami Valley Tech Prep Consortium oversaw more than a dozen programs at 58 area high schools, spanning seven counties in Ohio. However, within the area the Miami Valley Tech Prep oversaw, there were about 6,000 professionals who worked in DoD acquisitions, and no technical preparation programs were aimed at developing high school students' interest in that career field. Once the MVAC began its meetings, participants recognized that a technical preparation program needed to be developed to address the acquisition workforce.

Speaking the Same Language

A primary challenge we found to creating a program that focused on developing an acquisition workforce is

overcoming some of the language difficulties that can make it appear that the needs of DoD and industry are separate. To illustrate that issue, let me relate the following story about when the DAU Midwest, MVAC, and Miami Valley Tech Prep team visited the Ohio Department of Education.

In DoD, *acquisition* is used as an umbrella term for all the 12 career fields covered under the Defense Acquisition Workforce Improvement Act. It's commonly understood what acquisition means in DoD. However, non-DoD personnel don't have the same understanding. When the team traveled to Columbus, Ohio, to assist in the development of a high school technical preparation program for acquisition, the team discovered that the Ohio Department of Education did not share the DoD's understanding of what acquisition meant. In the struggle to find a common term, both *marketing* and *logistics* were proposed and found lacking. Eventually the technical preparation program for acquisition was officially titled Procurement, Acquisition, Logistics, and Supply Chain Management (PALS). This was a very complicated title, which itself caused some confusion in the broader education sector. The team recently determined that the bulk of what DoD calls acquisition can be addressed using the civilian term *supply chain management*. The Council of SCM Professionals defines supply chain management as:

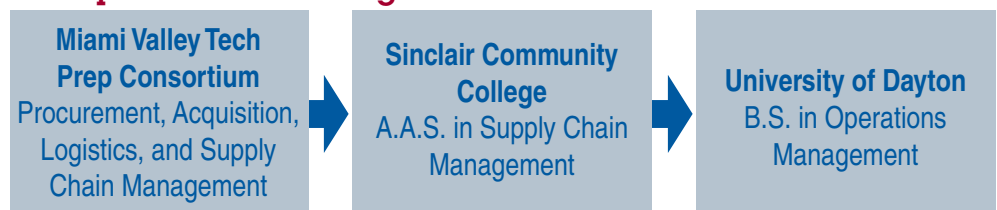
Planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Includes coordination and collaboration with channel partners (suppliers, intermediaries, third party service providers, customers). Integrates supply and demand management within and across companies.

Both those within and outside DoD are now able to use terms that are understandable to all the stakeholders in the Miami Valley. Once the communication challenges were overcome, MVAC began working to facilitate technical preparation geared toward developing future professionals for the acquisition workforce as well as for public and private sector supply chain management specialists.

MVAC Accomplishments

So, as a facilitating organization, what has MVAC accomplished?

Example of a 2+2+2 Program



Much improved coordination among local acquisition education sources. While the Miami Valley had a number of excellent independent educational programs that related to and could prepare the workforce for careers in acquisition, they were not well aligned in some ways. For example, a student who completed an associate's degree at a community college might not be able to transfer into a four-year college as a junior. Some course credits would not transfer, and the student might have to take classes similar to which he or she had already taken. Communication and articulations among the educational providers were limited. MVAC's goal has been to increase the communication and the articulations, and to provide smoother transitions for the students moving through the system toward an acquisition career.

Over the past six years, MVAC participants have met and discussed acquisition initiatives and acquisition education in a non-confrontational environment. As a result, the alignment between the programs and the number of articulation agreements has increased.

A pathway from the junior/senior years of high school (the PALS program) through community college and/or a four-year college, leading to a career in supply chain management or acquisition. The PALS program was jointly approved as a Career Technical Education/Tech Prep Program in December 2003 by the Ohio Department of Education and the Ohio Board of Regents. Three local high schools from three different counties are currently participating. Each school has adapted a specific curriculum design that reflects the local economic and school/student/community needs and interests. A school may develop a curriculum that supports a two-year career path (associate's degree) or a four-year path (bachelor's degree), or both. For example, the figure on the preceding page reflects a program with two years



The first question a company asks: "What kind of workforce do you have?"

Deborah Norris, Vice President for Workforce Development, Sinclair Community College

in high school (junior and senior years in technical preparation), two years in community college, and then two years in a four-year university to earn a bachelor's degree. This is called a 2 + 2 + 2 program, and agreements between Ohio educational institutions assure that all the credits from the community college are accepted by the four-year college.

This has been an overwhelmingly successful program. One school has reported they have more applicants for their PALS program than they have slots available for students.

Increased acquisition cooperative education (co-op) opportunities in the local area. Between 2004 and 2006, DAU provided funding for a trial program for acquisition co-ops through the Student Career Experience Program.

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Competition for the slots was intense, with 75 initial applicants from college sophomores, juniors, and seniors in acquisition-relevant degree programs. Fourteen students initially started in the program, and they gained experience working in finance, contracting, logistics, and program management alongside local acquisitions professionals. The results were very positive.

While some students left the program or moved to another area, the vast majority converted to civilian Air Force employees following college graduation. MVAC participants provided organization, management, and coordination between Wright-Patterson Air Force Base, DAU, and local colleges/universities in the selection and funding process.

“Previous students have greatly benefited from the outstanding training opportunities we can offer here,” said Teresa Marsee of the Aeronautical Systems Center Workforce Development Program Management and Logistics Career Programs. “We have had wonderful success with these fine students in the past, and we are interested in bringing another talented student on board if sponsorship/funding is available.”

Funding for this trial program lapsed in 2007, but given these very positive results and Section 852 of the 2008 National Defense Authorization Act, an initiative has started to place 20 new acquisition co-op students at Wright-Patterson Air Force Base—15 with the Air Force and five with the Defense Contract Management Agency. This initiative aligns directly with the objectives of the congressionally directed fund to develop and train the DoD acquisition workforce. Additionally, the State of Ohio has identified \$250 million state-wide to match company funds for co-ops in the private sector.

The existence of co-op positions validates the existence of DoD acquisition job opportunities to college students, and even to students in high school. Having co-op positions in acquisition is a great example of a force multiplier to build a stronger acquisition workforce.

Benefits of the MVAC

In addition to its accomplishments, the existence of an active MVAC has advanced the development of a future acquisition/supply chain management workforce through the following activities:

- Presented acquisition career field(s) at high school education fairs and Wright-Patterson Air Force Base education fairs.
- Briefed local high school business teachers on the supply chain management career field. High school teachers have a huge influence on students' selection of career fields. To get acquisition/supply chain man-

agement into the minds of the future workforce, the high school teachers must be aware of the career field and the opportunities.

- Assisted in the development of DoD acquisition courses at a civilian college. These courses cover all the competencies specified for the DAU courses, providing an alternative source for certification courses that is not constrained by membership in the DoD acquisition workforce. These courses are developed to cover all the course competencies. They use DAU course materials as part of the required readings, but they are structured for evening classes scheduled over a college quarter. Those who want DoD credit for the courses for certification purposes will need to complete and submit a fulfillment form.
- Provided a presentation on supply chain management to 80 audience members at the DAU-Wright-Patterson Air Force Base Insight Days, held April 22 to 23.
- Worked with Sinclair Community College to develop a plan for a National Center for Logistics and Supply Chain Management. Sinclair Community College is teaming with Riverside Community College in California.

Moving Forward

The Miami Valley has a strong position in logistics/supply chain management resulting partially from the presence of the Air Force Material Command Headquarters, Aeronautical Systems Center, and the other military organizations on Wright-Patterson Air Force Base. In addition, the area around the air base has drawn and continues to draw significant commercial activity in both air and ground distribution.

Improving the DoD acquisition workforce for the Miami Valley area requires recognition that the issue is not DoD specific, and that the solution can be best found through a multi-level effort to recruit, educate, and train. The MVAC was the basis for a cooperative partnership between DoD, industry, and local academic institutions, and those stakeholders are taking steps to support this partnership. Between support from Congress through the 2008 National Defense Authorization Act for DoD and the support of the State of Ohio for the commercial sector, a robust workforce development program for acquisition/supply chain management can be built.

The author welcomes comments and questions and can be contacted at roland.kankey@dau.mil.

Developing an Integrated, Agile, and High-Performing Future Workforce

The DoD Logistics Human Capital Strategy

Christopher Blodgett ■ Carol Conrad ■ Bill Kobren



The DoD logistics human capital strategy will set a new standard for competency-based workforce professional development and career management.

The Department of Defense logistics workforce, numbering approximately 1 million, exists to deliver agile, timely, precise, and cost-effective support to the warfighter, ensuring readiness and sustainability for those who support the armed forces across the spectrum of military operations. While its mission and purpose are constant, the logistics workforce faces a perpetually evolving strategic environment. As the world changes rapidly, profoundly, and in every dimension—social, economic, and political—the logistics workforce needs to continuously evolve and operate in a way that optimizes the human capital of the entire enterprise rather than individual parts.

The DoD logistics workforce is composed of four workforce categories: supply management, deployment/distribution/transportation, maintenance support, and life cycle logistics.

It is imperative that the logistics workforce align its human capital with transformed warfighting, modernized weapons systems, business rules, emerging enterprise management systems, and executive-level strategic goals. The community should also be grounded in teamwork and collaboration so that ultimately, all logisticians across the enterprise will view one another as partners and contributors willing to support each other in mission accomplishment.

The DoD Logistics Human Capital Strategy

The DoD Logistics Human Capital Strategy (HCS), located online at < <http://www.acq.osd.mil/log/sci/hcsp.htm> > , supports these goals and fulfills the requirements and objectives of the President's Management Agenda, the Quadrennial Defense Review, the *DoD Civilian Human Capital Strategic Plan*, and the *AT&L Human Capital Strategic Plan*. It has been developed to serve as a valuable resource for

Blodgett is a supply chain management consultant with IBM Global Business Services and has supported a number of defense logistics initiatives.

Conrad is a senior staff logistics management specialist in the Office of the Deputy Under Secretary of Defense for Logistics and Materiel Readiness.

Kobren is director of the Logistics and Sustainment Center at the Defense Acquisition University.

the logistics human capital efforts of the military services, defense agencies, and combatant commands. It provides a clear vision that establishes the foundation for the future logistics workforce, culture, and human resources practices. According to James Hall, the assistant deputy under secretary of defense for logistics plans and studies, “Developing the right mix of competencies that enable logisticians to succeed in a joint operating environment requires coordination and collaboration among the Services, DLA [*Defense Logistics Agency*], TRANSCOM [*U.S. Transportation Command*], and the Joint Staff. The human capital strategy for logisticians assists in achieving this objective.”

Vision and Overview

The DoD Logistics HCS vision is an integrated, agile, and high-performing future workforce of multi-faceted, interchangeable logisticians that succeed in a joint operating environment. Six elements will contribute to success: logistics competencies and proficiencies; the logistics career roadmap; the logistics competency development framework (LCDF); education, training, and developmental assignments; the certificate/certification program; and the executive steering group (ESG).

The bedrock of the Logistics HCS vision is competency-based management of the DoD’s logistics workforce, manifest in the creation of a logistics career roadmap with a common lexicon and set of core logistics competencies and proficiencies. The LCDF will enable the roadmap to provide the future logistics workforce with the right mix of function-specific subject matter experts and multi-faceted enterprise logisticians.

Carla Lucchino, assistant deputy commandant for installations and logistics, U.S. Marine Corps, believes this initiative is exactly what her Service needs. “The DoD human capital strategy will quickly command the attention of senior USMC military and civilian leadership within the Marine Corps. With this strategy in hand, we will conduct our internal assessments on the career paths we need to implement to groom the next generation of senior civilian supervisors and technicians. The DoD human capital strat-

egy is the next big step in reaffirming senior leadership’s commitment to the work force of today and tomorrow.”

Historically, the logistics population was predominantly composed of personnel possessing a depth of knowledge in one specific area demonstrated by a narrow range of expertise within one function field; they are classified as “I” people. As careers progressed, some logisticians expanded their knowledge of logistics to include a second or third functional field; those with this expanded knowledge are known as “T” people, indicating they possess broader knowledge with depth in some, but not all, logistics fields. Multi-faceted logisticians with expertise in many segments and knowledge of the end-to-end logistics process are designated “E” people, with the E standing for enterprise logisticians. The E person goes beyond the I and the T people. The future logistics environment necessitates a DoD logistics workforce made up of all three types of people; however, the most significant growth in the coming years will be in both T- and E-type logisticians.

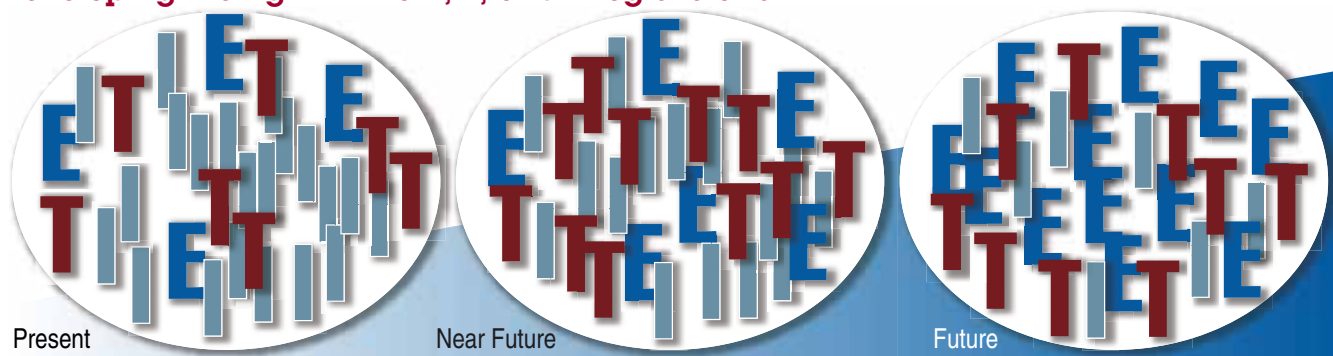
Logistics Competencies and Proficiencies

Populating the LCDF and developing logistics roadmaps involves identification, definition, and validation of technical competencies and proficiencies for the logistics workforce. The identification of logistics technical competencies implements a DoD logistics community common lexicon.

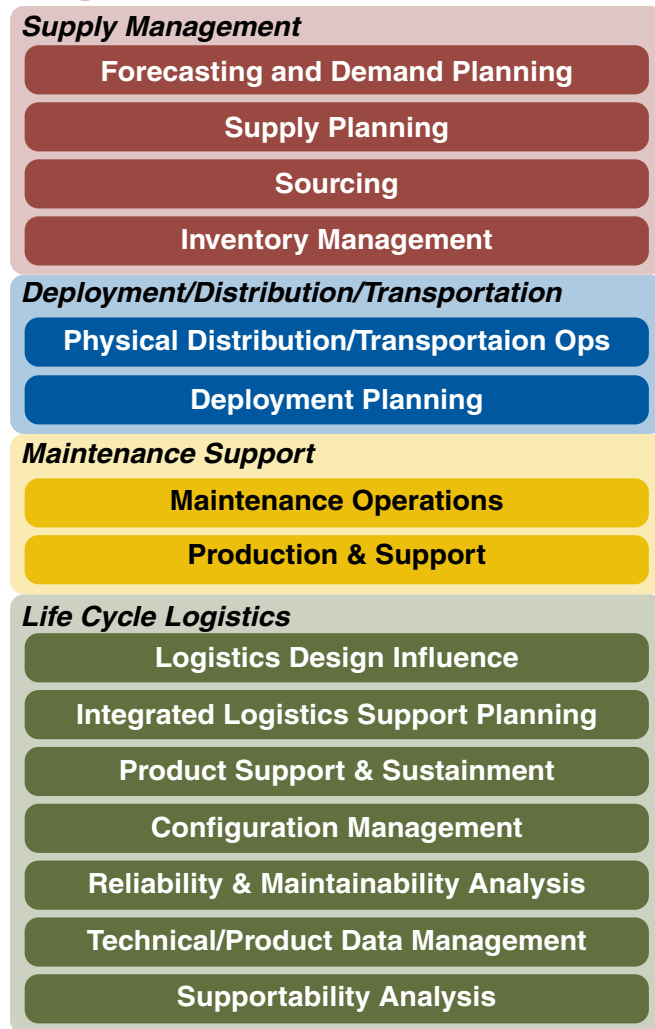
A **competency** is defined by the Office of Personnel Management as a measurable pattern of knowledge, skills, abilities, behaviors, and other characteristics that are needed to successfully perform work-related tasks. Competencies are developed, attained, and sustained through training, rotational and developmental assignments, experience (both professional and personal), education, and self development. Attainment of a certain level of competency is assessed based on demonstrated abilities to apply the competency in different situations and/or circumstances. Attainment is based not just on performance in a role over time, nor is it tied to grade or rank.

Three types of competencies have been identified and defined:

Developing the right mix of I, T, and E logisticians



Logistics Workforce Category Technical Competencies



- Workforce category technical competencies, of which there are 15, describe logistics work specific to each of the four identified workforce categories. Workforce category technical competencies are defined and assessed from level 1 to level 5, with level 1 reflecting an entry-level capability and level 5 reflecting enterprise-wide recognized subject matter expertise.
- Fundamental competencies, of which there are six, describe fundamental skills and abilities necessary for all logistics personnel, regardless of specific workforce category. Fundamental competencies are defined by OPM and assessed at three levels: foundation, experienced, and advanced.
- Leadership and management competencies, of which there are 25, describe skills and abilities required by logistics leaders and managers. Defined by OPM with input from DoD, these competencies are assessed at three levels: foundation, experienced, and advanced.

Proficiencies are the building blocks of competencies. To define the 15 technical competencies at five levels of capa-

bility, logistics subject matter experts identified hundreds of proficiencies. Each proficiency provides a description of the demonstration of attaining and sustaining a competency through increasing levels of relevant, timely, and applicable experiences. The proficiencies offer guidance as to the work, skills, knowledge, and abilities necessary to be competent across a career field. The proficiencies depict the growth of a competency across five levels.

Identification of competencies results in a common lexicon across the logistics workforce supporting the tenets of logistics workforce development. This enables more rapid and efficient ramp-up when teams from multiple Services, agencies, and/or combatant commands must be brought together in a joint environment. While individual experiences will differ, all staff will share a common understanding and will be able to communicate effectively when the boots hit the ground.

Career Roadmap

The DoD Logistics HCS provides a career roadmap for logisticians across the Services and agencies to progress from entry level to senior leader level. Five levels of logistics technical competencies, grouped into the four workforce categories, are arranged in a progression from individual focus to organizational focus. As logisticians advance through the five competency levels, some are expected to have an increasingly broad, enterprise-wide perspective as well as joint experience. The LCDf provides a clear framework for presentation of this information, allowing individuals to see where they are on the continuum and what is expected of them to demonstrate their progression to the next level. From this, individuals can proactively manage their professional development.

Logistics Career Development Framework

The LCDf is a structured management framework of processes, tools, and strategic guidance used to enable the education, training, and development of the logistics workforce. In short, the LCDf provides a repository for the developed competencies and provides the framework for career roadmaps so employees and leadership can manage and assess professional development. The LCDf facilitates professional development and enterprise-wide workforce management.

Career planning can be an overwhelming task. The LCDf and the career roadmaps will provide guidance as logisticians plan their careers within DoD. Together, the LCDf and career roadmaps will allow the logistician to see how far he/she has come, what is required in his/her current assignment, and what is necessary to succeed in the future. Rather than time in grade, an individual's progression involves the documentation of relevant training and education and demonstration of competencies. Staff can assume greater responsibility for career development by following the flexible roadmaps according to

their strengths, needs, and available positions. Moreover, by providing a clear basis and focus for coaching, the roadmaps provide leadership with a mechanism to more effectively act in the capacity of mentor.

The LCDF creates a single approach to logistics professional development across the Services, agencies, and combatant commands. It provides a tool for the planning and evaluation of professional development.

Education, Training, and Developmental Assignments

Development of enterprise logistician competencies is supported by education, training, and developmental assignments. Work has already begun to identify education and training necessary to support the creation of enterprise logisticians. This involves analysis

and reconciliation of existing resources within the Services, agencies, combatant commands, and academic and industry partners. Where redundancy exists, education and training resources can be combined or leveraged to increase efficiency and promote logistics integration across the enterprise. Where existing programs are insufficient to prepare for future needs, education and training must be developed and adequately resourced to ensure today's logistics workforce is given the tools necessary to succeed in the future.

Certificate/Certification Program

A DoD-specific certificate/certification program will support the LCDF by providing a program of recognition that defines levels of professionalism over the course of an individual's career. Certificate/certification is a step beyond the assessment process and carries an added degree of significance. Individuals who elect to pursue the certificate/certification process will need to meet the standards

"This effort will produce well-rounded career logisticians that are highly functional and adaptable—critical to the DoD in the post 9/11 environment."

Pat Tamburrino, Assistant Deputy Chief of Naval Operations, Fleet Readiness and Logistics (N4B), U.S. Navy

established by DoD. The standards may include education levels, continuing education requirements, and developmental assignments.

Together, the Services and agencies will outline the requirements for certificate/certification levels; the process will leverage existing DoD certification models such as the life cycle logistics Core Plus construct, which was designed to advance the DoD acquisition, technology, and logistics competency management model by providing a roadmap for the development of acquisition workforce members beyond the minimum certification standards required for their position. The Defense Acquisition University (DAU) Catalog provides acquisition workforce members with a listing of the core certification standards by acquisition career field and

level, as well as Core Plus knowledge and skills that are delivered through coursework that targets functions or tasks directly related to specific types of job assignments. Core Plus also helps identify the right learning for the right people at the right time during their professional development. It does this by connecting workforce members not only to their career field and level, but also to their particular job assignment needs. Additionally, Core Plus identifies targeted training that relates to specific tasks in a given assignment type. As Core Plus matures, DAU anticipates such benefits as the development of more well-rounded acquisition core coursework; shorter functional courses required for certification; an increase in modular course content; an increase in courses targeted to workforce job assignments; and more flexibility, focus, and guidance in the construction of individual development plans. Use of targeted, competency-focused training constructs similar to the Core Plus framework for the broader DoD logistics workforce will be developed and communicated across



**“The new
DoD logistics
human capital
strategy will
provide military
logisticians
with common
processes, tools,
and procedures
to support the
warfighter.”**

**Michael Aimone, Assistant
Deputy Chief of Staff,
Logistics, Installations and
Mission Support, U.S. Air
Force**

the logistics workforce. Certificate/certification requirements for the broader logistics workforce will also require the workforce's distinct process based on the LCDF assessment process.

Executive Steering Group

The ESG comprises senior leaders from the Office of the Secretary of Defense, Services, agencies, and combatant commands possessing logistics populations. The primary role of the ESG is to coordinate and provide guidance for the Logistics HCS. In this role, the ESG reviews and validates logistics competencies, advocates and supports human capital strategy-related change, addresses challenges and provides strategic direction, and sponsors and supports logistics subject matter expert participation.

Implications for the AT&L Life Cycle Logistics Workforce

The life cycle logistics workforce, numbering approximately 12,600 at the end of fiscal year 2007, is a subset of the larger DoD logistics workforce. Like the other three primary workforce categories—supply management, deployment/distribution/transportation, and maintenance support—specific life cycle logistics technical competencies and proficiencies have been identified as part of this broader Logistics HCS development.

Defined as the ability to plan, develop, implement, and manage comprehensive, affordable, and effective systems-support strategies, LCL encompasses the entire system's life cycle, including acquisition (design, develop, test, produce, and deploy); sustainment (operations and support); and disposal. Life cycle logisticians who meet required Defense Acquisition Workforce Improvement Act (DAWIA) certification requirements for training, education, and experience are expected to be capable of translating warfighter performance requirements into tailored, affordable, and effective product support spanning a system's entire life cycle.

The Logistics HCS identifies the competencies and proficiencies required to achieve that performance outcome. The seven top-level life cycle logistics technical competencies identified in the human capital strategy are logistics design influence, integrated logistics support planning, product support and sustainment, configuration management, reliability and maintainability analysis, technical/product data management, and supportability analysis. Identification of these technical competencies will result not only in continued improvement and refinement of the learning assets and DAWIA certification training provided by the DAU but will ultimately enhance the quality of the support provided by, and the expertise of, the life cycle logistics workforce. The Logistics HCS will also help facilitate continued integration of personnel, competencies, and expertise of the life cycle logisticians with the broader DoD logistics community,

ultimately providing even greater quality support to the warfighter.

DAU has already undertaken an initiative to aggressively ensure these competencies and proficiencies are incorporated into existing courseware, allowing the latest, most current requirements to be captured in the Core Plus framework. The learning assets identified in the Core Plus career field certification and Core Plus development guides outlined in Appendix B of the DAU Catalog (including Web-based continuous learning modules and training courses, in addition to extensive learning materials on the Logistics community of practice) will be reviewed and updated in the coming months as a result of this comprehensive DoD Logistics HCS development effort. This will ensure the logistics workforce in general, and the life cycle logistics workforce in particular, have access to the most current and relevant learning resources to meet the rigors of the rapidly evolving logistics environment.

The Road Ahead

The DoD Logistics HCS will set a new standard for competency-based workforce professional development and career management. It is not only intended to provide a clear, easily understood, and comprehensive career roadmap for DoD logisticians, but the cutting-edge LCDF will streamline professional development, facilitate enterprise-wide workforce management, establish a common lexicon, and synergistically link the logistics workforce as never before.

The DoD has made significant progress towards realizing the human capital strategy vision. Logistics workforce categories, competencies, and proficiencies have been defined, and work has begun to identify supporting education, training, and developmental assignments. Going forward, the human capital strategy charts an ambitious course for implementation of the LCDF and the well-defined career path roadmaps for the future's I-, T-,



Important Links

DoD Logistics Human Capital Strategy

www.acq.osd.mil/log/sci/hcsp.htm

Acquisition Community Connection

<https://acc.dau.mil/>

DAU Catalog

www.dau.mil/catalog/

Logistics Community of Practice

<https://acc.dau.mil/log>

Training courses

<http://training.dau.mil/>

Web-based continuous learning modules

<http://clc.dau.mil/>

and E-type logisticians. Key next steps include identifying consistent criteria and a standard process for assessing a logistician's competency levels and overall professional development; publication of career path roadmaps for I-, T-, and E-type logisticians; and development of a pilot implementation to support future activation of the LCDF. The ultimate outcome of this far-reaching initiative, of course, is a robust, integrated, agile, and high-performing future workforce of multi-faceted, interchangeable DoD logisticians who are capable of succeeding in a joint operating environment.

The authors welcome comments and questions and can be contacted at carol.conrad@osd.mil, cblodgett@us.ibm.com, and bill.kobren@dau.mil.

A Clear View of the Workforce

New Tools Enable Better Metrics

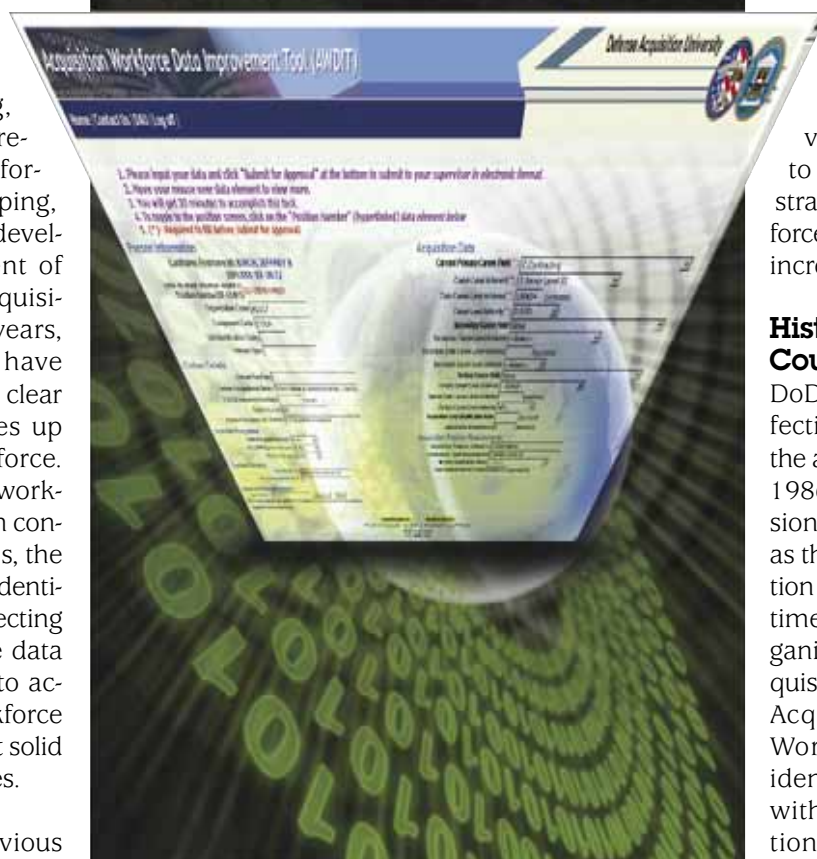
Jeffrey Birch ■ Chuck Cameron ■ Margot Lynn ■ Carol Scheina

Accurate, current, and complete acquisition workforce data is critical in human capital management; and collecting, analyzing, and reporting comprehensive workforce information is vital to shaping, understanding, and developing the Department of Defense's diverse acquisition workforce. For years, multiple challenges have existed in obtaining a clear picture of who makes up the acquisition workforce. Although thoughtful workforce counts have been conducted since the 1980s, the disparate methods of identifying, coding, and collecting acquisition workforce data has made it difficult to accurately capture workforce numbers or to conduct solid analyses and strategies.

There have been previous attempts to better understand the workforce shape and mix, but it is now a top priority of Frank Anderson, director of AT&L Human Capital Initiatives and the president of the Defense Acquisition University. Through effective collaborations with DoD leadership, the department is moving closer to an ability to identify, code, and report increasingly accurate workforce data.

There has not been a dedicated workforce data management team or standard reporting process until now. Under Anderson's leadership and through the support and participation of numerous partners, DAU has developed

The Acquisition Workforce Data Improvement Tool



a network-centric capability that allows increased reliability of data regarding workforce size, certification, experience, and education. This capability continues to evolve, and it provides more granularity to allow DoD to develop strategic and tactical workforce-shaping decisions with increased specificity.

History of Workforce Count

DoD has long sought an effective method to measure the acquisition workforce. In 1986, the Packard Commission used a method known as the Acquisition Organization Workforce Count. At the time, there were 22 DoD organizations identified as acquisition organizations. The Acquisition Organization Workforce Count simply identified every employee within those 22 organizations as a member of the acquisition workforce, regardless of the employee's

actual occupational roles and responsibilities.

A Refined Packard approach was applied in May 1997. Using this approach, DoD occupational and organizational data was compiled and analyzed to determine those who should be identified as members of the acquisition workforce, regardless of which DoD organization the individual worked for. The military services and DoD organizations (constituting the 4th Estate) compiled information on an employee's position and qualifications. That manpower and personnel information was sent directly to the De-

Birch is the 4th Estate director for Defense Acquisition Career Management and Career Support Center. **Cameron** and **Lynn** are program managers for the Acquisition Workforce Data Improvement Tool. **Scheina** is the managing editor, Defense AT&L magazine.

fense Manpower Data Center (DMDC), which oversees DoD's archives of automated manpower, personnel, and training data.

Since 1997, both the Acquisition Organization Workforce Count and the Refined Packard approach have been used to determine who makes up the acquisition workforce. But these methods have not provided a count as accurate or comprehensive as DoD needs in order to develop workforce planning strategies and plans.

Challenges in Obtaining Accurate Numbers

Determined to make workforce decisions based on accurate, current, and correct data, the military services and the 4th Estate began developing separate management information systems. These systems were developed unilaterally, and they functioned independently of each other and the Defense Civilian Personnel Data System (DCPDS). The data maintained in these systems were uploaded into the DMDC warehouse.

When the military services' and the 4th Estate's individual management information systems records were compiled into the DMDC warehouse, there were often widespread errors. The most common error was duplicate records. Since the various information systems were not linked, employees who worked in multiple components would have a record for each component in which they worked. Meaningful analysis of the aggregated data was exceedingly difficult, as was removing duplicate records.

Within DCPDS, similar problems exist. The DCPDS architecture requires human resource specialists to update and maintain records at their office. Those updates flow into a server, referred to as a region. Until recently, the Army and Navy maintained multiple regions, and within the 4th Estate, multiple components could be housed in one region. The problem of multiple regions meant that it was difficult to keep the data updated and refreshed, and there needed to be multiple file updates done through multiple points of contact.

A variety of processes worked against accuracy in DCPDS. For instance, when employees transferred and their records moved to a different region, acquisition data could be lost, or the human resource specialist's unfamiliarity with the requirements of the acquisition career program would result in data elements being dropped out of a record or entered incorrectly. Another challenge was that oftentimes, the job description alone would not identify the acquisition career field in which an employee performed functions. While the expectation is that acquisition workforce employees are given a job code (or job series) that identifies them as being in one career field, the position descriptions for a job often did not facilitate easy identification of the primary duties of the position. For instance, a position may contain duties that fall into systems engi-

neering, information technology, test and evaluation, or contracting. If the primary focus of the position was not clearly identified, the position could be miscoded.

Identifying the Need for Better Metrics

The under secretary of defense for acquisition, technology and logistic's (USD[AT&L]) *Strategic Goals Implementation Plan*, version 2.0, includes an initiative, "Establish a comprehensive workforce analysis and decision-making capability." Additionally, the *AT&L Human Capital Strategic Plan*, version 3.0, released June 2007, recognizes the importance and need of developing a clear picture of the acquisition workforce. Across the department, there is a common need—that of accurate, current, and complete workforce data and a means to collect, maintain, and report this information when necessary. The capability would allow acquisition leaders to:

- Make better decisions regarding workforce management
- Develop consistent and in-depth analyses of the workforce
- Provide on-demand information regarding acquisition workforce demographics, metrics, trend data, and initiatives to those who need to see it.

"High-quality workforce information that is current, accurate, and complete is mandatory for effective human capital management. Without accurate, reliable information, decision makers cannot effectively ensure that the acquisition workforce is adequately staffed and trained," according to the *AT&L Human Capital Strategic Plan*.

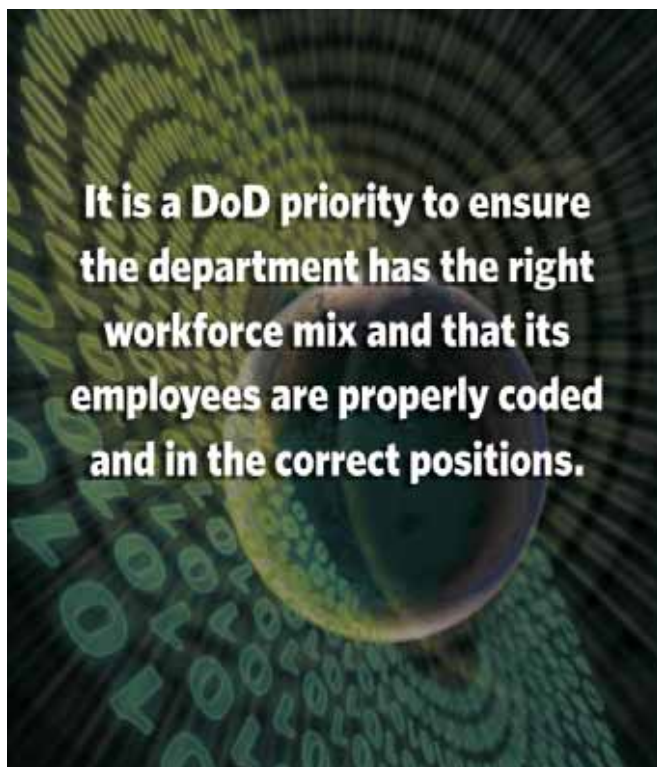
The *Strategic Goals Implementation Plan* requires that the acquisition community establish business rules for workforce data interface with the organizations/systems storing the information, establish reporting and analysis protocols, and provide a comprehensive workforce analysis.

The need for a clear workforce analysis capability led to the development of the Comprehensive Acquisition Workforce Data Analysis Capability, formerly called the Data Green Initiative.

The Comprehensive Acquisition Workforce Data Analysis Capability

At the heart of the Comprehensive Acquisition Workforce Data Analysis Capability is a tool called the AT&L Workforce DataMart, which was developed from pre-existing commercial-off-the-shelf software owned by DAU. The university imported the acquisition workforce data into the software so it could be used to track career acquisition data.

The AT&L Workforce DataMart essentially serves many purposes. It de-conflicts workforce members who may be claimed by multiple components to provide the most accurate acquisition workforce count to date. The business



Eliminating the Middleman

A Web-based application is currently giving workforce data transparency to AT&L 4th Estate workforce members and control to career managers. It also eliminates the requirement for 4th Estate organizations to compile and submit their data on a quarterly basis. The newly developed Acquisition Workforce Data Improvement Tool permits employees, their supervisor, and career managers to view and update their specific acquisition data.

In order to access AWDIT, employees receive a password for the system that allows them to access their personal information. Information recorded in AWDIT includes position data such as organizational code, job series, pay plan, and grade level depending on what is relevant to the employee. Several fields are already populated with data from DCPDS based on what the official human resources and position description records contain. The tool also provides personal data such as the primary, secondary, and tertiary career fields the employee is certified in and what level the employee has obtained in those career fields. The personal data fields also note the acquisition position qualifications of the employee. For instance, it indicates if the employee is a member of the Acquisition Corps as well as the employee's acquisition program indicator (ACAT I or ACAT II, etc.), if applicable.

AWDIT enables employees to review and update their position and personal information on a regular basis. Once the employee has updated and submitted the information, the employee's supervisor receives e-mail notification that the information has been updated. The supervisor reviews the changes and either indicates concurrence or non-concurrence. The employee receives an e-mail notice when the supervisor has reviewed the changes. If the supervisor concurs, the director of the organization's Defense Acquisition Career Management is notified by e-mail of the change and approves or disapproves it. If approved, the data is updated in AWDIT.

Organizations in the 4th Estate such as the Office of the Secretary of Defense, the Defense Information Systems Agency, the Defense Threat Reduction Agency, and the Department of the Defense Education Activity have already implemented AWDIT. DAU data managers have worked with 4th Estate organizations to establish a process that works for each organization. For instance, one organization requested that the supervisory review of information in AWDIT be skipped and go directly to the career manager for approval, and AWDIT was modified to accommodate that request.

Improving the Tool

DoD's goal is to ultimately and with increased certainty be able to access, analyze, and report an accurate, current, and complete summary of the acquisition workforce. DAU is working on a number of initiatives that will improve the

intelligence tools within the AT&L Workforce DataMart provide stakeholders such as the military services, 4th Estate career managers, the functional integrated process teams, and the DoD human capital planners with the capability to run reports to conduct analysis and make strategic decisions regarding the workforce. The data in the AT&L Workforce DataMart is populated with data defined in DoD Instruction 5000.55, Reporting Management Information on DoD Military and Civilian Acquisition Personnel and Position, which was driven by the Defense Acquisition Workforce Improvement Act.

Now that DataMart is established as a tool for workforce data compilation, the military services will provide their acquisition personnel data and submit it via secure file transfer to the DataMart system on a quarterly basis. Acquisition workforce data managers will use DataMart to review those quarterly submissions for accuracy, completeness, standardization, and even potential duplicate entries before the information is sent to DMDC and DCPDS. Thanks to a partnership between DAU and DMDC, once acquisition data has undergone review in DataMart, it is sent directly to the center's warehouse.

"It provides improved interfaces, data handling, and analysis capabilities, and it establishes a consistent, recurring process for data-driven workforce analysis. It fully captures accurate workforce attributes such as size, career field certifications, tenure, and other data elements required to promote effective strategic decisions in the planning, hiring, development, and management of our diverse workforce," said John Young, USD(AT&L).

AT&L Workforce DataMart's and AWDIT's ability to create an enterprise-wide solution to developing a complete workforce summary:

- Continue to optimize new opportunities to build and integrate systems and methods to gather and share knowledge across the enterprise.
- Increasing collaboration with and integration of DoD components' workforce management information systems to encourage standardization of information.
- Establishing a partnership with DCPDS to implement initiatives to improve the data updating process for the acquisition information required per DoD Instruction 5000.55.
- Engaging with the Defense Information Military Human Resource System so military personnel information can eventually integrate seamlessly with the AT&L Workforce DataMart.
- Enhancing the self-service utility in MyBiz to allow acquisition personnel the ability to view their acquisition information and to request corrections within MyBiz.

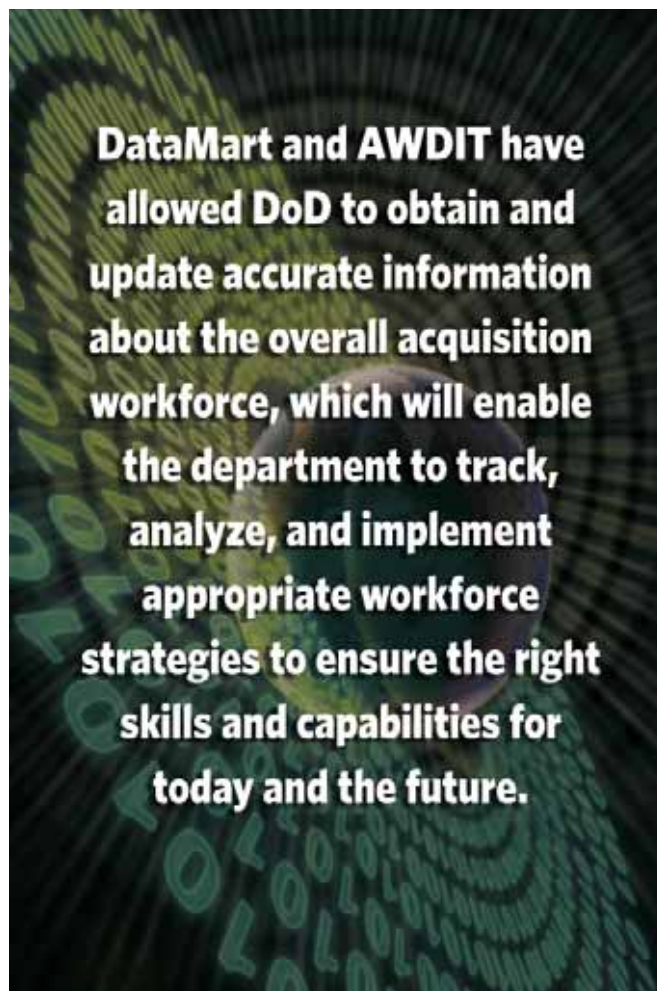
Standardizing Data Requirements

An important part of collecting the data is ensuring standardization of the information. This is being done by developing standard competency models for all 12 Defense Acquisition Workforce Improvement Act career fields in the DoD acquisition workforce. Each career field maps the array of competencies and performance criteria required to be successful in the acquisition career field. The collective goal is to create a common language that will describe workforce capabilities and the criteria required for superior job performance. DoD acquisition functional leaders; component acquisition leaders; field subject matter experts; DAU; and the Center for Naval Analyses, which specializes in competency modeling, have all contributed to this effort, and it is expected to be completed later this year.

The Future Workforce

Through collaboration and participation from the 4th Estate, the DoD acquisition community has established reporting and analysis protocols to improve DoD acquisition workforce analysis and outcomes. The capabilities provide the USD(AT&L) and component leaders with accurate and timely data-driven information to better shape smart workforce decisions that are necessary to recruit and hire people who can become the acquisition community's next leaders.

It is a DoD priority to ensure the department has the right workforce mix and that its employees are properly counted, coded, and in the correct positions. With the Comprehensive Acquisition Workforce Data Analysis Capability, DoD is devoting significant attention to identifying and shaping the acquisition workforce as an enterprise asset, from ensuring the best management of all person-



nel to updating the standard definition of the acquisition workforce. DataMart and AWDIT have allowed DoD to obtain and update accurate information about the overall acquisition workforce, which will enable the department to track, analyze, and implement appropriate workforce strategies to ensure the right skills and capabilities for today and the future. This effort has already improved the reliability, analysis, and transparency of workforce information by updating and standardizing data requirements, creating a centralized data repository, and establishing a consistent, repeatable process for data-driven workforce analysis.

The department must reinvent itself, its processes, and its thinking continuously. It is critical that DoD sees itself as part of a community to neighborhood that comes together as stakeholders around joint projects. Collectively, DoD must embrace human capital initiatives as a critical element to ensure the enterprise succeeds.

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Excellence in Diversity and Recruitment

Matthew Tropiano



NAVSEA's recruitment strategy has been a demonstrable resounding success and is leading towards an inspired, motivated, and increasingly diverse acquisition workforce.

Since its inception, the Office of Corporate Recruiting has been spearheading Naval Sea System Command Headquarters' initiatives to hire the best, increase the diversity, and retain highly qualified employees for NAVSEA through the Naval Acquisition Intern Program (NAIP). These efforts are ultimately changing the dynamic workforce of NAVSEA and impacting two of the five strategic goals that both then-NAVSEA commander Vice Adm. Paul E. Sullivan and current NAVSEA commander Vice Adm. Kevin McCoy have indicated are critical to the organization's strategic business plan: Strive to attract, recruit, develop, and retain a high-performing, competency-based, mission-focused workforce; and build and value a culture of diversity.

Last year, the average grade point average of NAVSEA's new NAIP hires was 3.4. Six out of 10 interns were racial or ethnic minorities or women. This article will outline how NAVSEA is increasing diversity among new hires, making the most of job fairs, maximizing information sessions, implementing interview panels, and addressing retention issues.

Pulling Them In: The Job Fair

The strategy at the job fair is to attract and share NAVSEA's vision with high-potential applicants. The NAVSEA team that recruits at the job fair represents a cross-section of NAVSEA top- and mid-level managers, but mostly the team is composed of newer hires who share their recent NAVSEA experiences with applicants.

Positioning the display booth is important. The director of recruitment works closely with the job fair coordinator to ensure that NAVSEA's booth is positioned next to the particular university's or region's top employer. NAVSEA's goal is to recruit the same top applicants who are also considering those employers.

NAVSEA's job fair recruiters promote the significant size and impact of what NAVSEA does. Constantly running is a video displaying the design and development of NAVSEA ships and submarines, as well as the other the critical services NAVSEA and the U.S. Navy provides. "Ever Buy One of These?" a NAVSEA poster asks potential jobseekers; under the headline are pictures of a submarine and an aircraft carrier.

The NAVSEA booth also promotes the evening's informational session, which features a multimedia experience about NAVSEA.

***Tropiano** is a recruitment analyst. He entered government service in 2001 as a Presidential Management Fellow. His background includes degrees in electrical engineering, business, and religious studies.*

The recruitment team is very proactive, approaching candidates as they walk into the job fair, talking to them while they line up at other booths, and seeking out officers in recognized societies (for example the Society of Women Engineers, Society of Mechanical Engineers, etc).

Giving Them the Full Story: The Information Session

The desired outcome of the day's job fair is to have interested, high-potential applicants sign up for and attend NAVSEA's evening informational session. Recruiters distribute invitations and make follow-up phone calls to remind applicants of the information session.

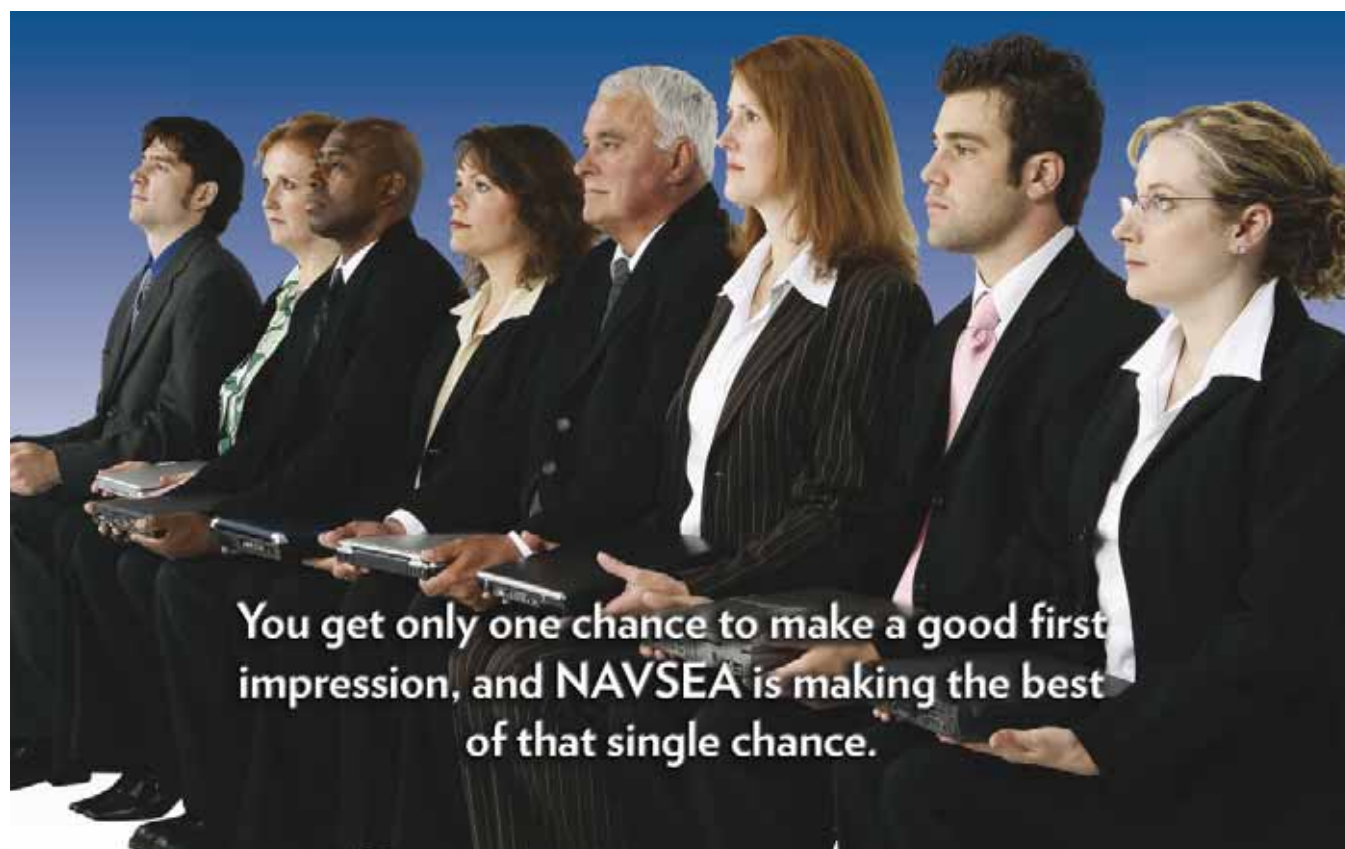
The strategy of the information session is to present an attention-getting multimedia presentation of who NAVSEA is, what NAVSEA does, where NAVSEA is located, and what types of applicants NAVSEA is looking for. Studies have shown that today's graduates are looking to serve something greater than themselves, so key NAVSEA video clips emphasize service to the United States and to the fleet. A cross section of NAVSEA employees, from top-level executives to mid-level managers to recent new hires, present their experience and perspective, and they talk about how they have risen through their development and experience at NAVSEA. The presenters remind listeners that they, too, were once sitting where the listeners are, and since then, have been able to serve the United States in a career-developing and satisfying manner.

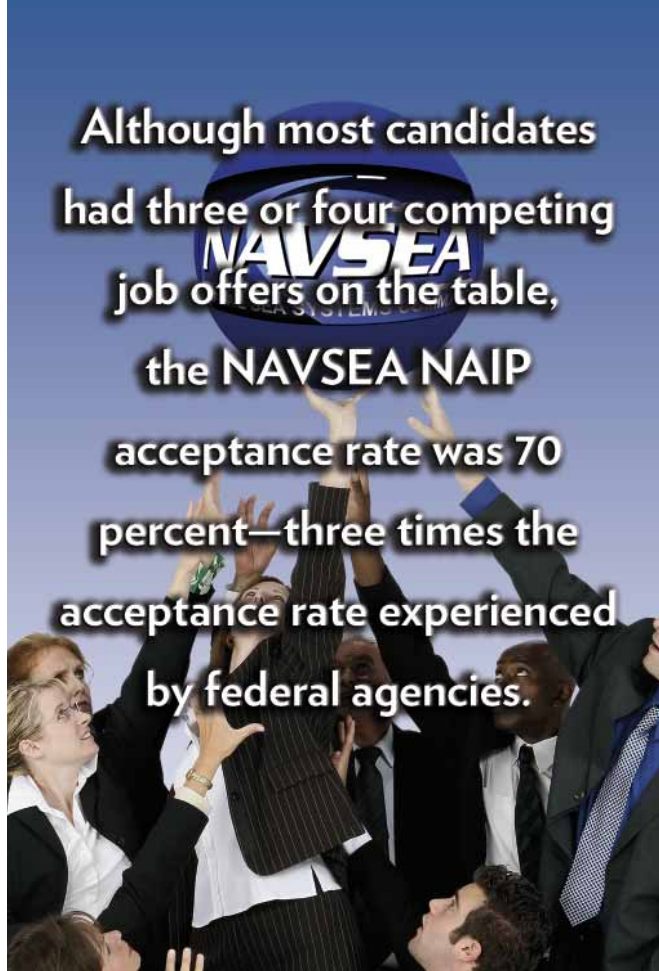
We aim for the information session to intrigue and interest applicants about working for NAVSEA, and we hope that NAVSEA employees will get to know the applicants better in a smaller, more relaxed environment. During the job fair and the information session, both the potential applicants and the recruitment team are assessing the potential employment match. At the end of the information session, the recruitment team sits down to review all the applicants—considering demonstrated leadership, experience, education, and academic excellence—for potential best fit within NAVSEA.

Getting to Know Them: The Interview Panel

Following the job fair, high-ranking applicants are invited to the Washington Navy Yard. Two to four NAVSEA employees meet with the candidate upon arrival and provide the candidate with an even closer look at the services NAVSEA offers and the kind of work performed. The candidate then meets with an interview panel made up of four to six top-level leaders and managers.

The interview panel's goal is to identify the best-fit candidates. The interview panel aspires to build a highly committed, knowledge-based workforce for 2020; a workforce that reflects the demographics of the future. NAVSEA is in a competition for talent, so the interview panel strives to create a relaxed environment where the candidates can be themselves. The interview panel doesn't interrogate the candidates, but strategically explores areas of mutual interest such as continuing education, long-term career





goals, service to the fleet, and ultimately, service to the United States.

NAVSEA's selection official receives feedback from the interview panel and extends offers based on the panel's recommendations.

The New Hires: Who They Are

As I mentioned earlier, the mean average GPA of NAVSEA's 2007 new NAIP hires was 3.4, comparing very favorably to the program's minimum requirement of 3.0; and six out of 10 interns were racial or ethnic minorities or women. Even though only 15 percent of engineering undergraduates are female, 40 percent of those in the final round of interviews for engineer positions were women.

NAVSEA focused recruitment efforts on top-ranked schools in the mid-Atlantic area. Candidates were hired from more than 20 universities, including such top schools as the Massachusetts Institute of Technology, Webb Institute, Duke University, Johns Hopkins University, Carnegie Mellon, Penn State University, and the University of Virginia.

The recruitment program attracted other noteworthy applicants and candidates, among them the Department of Defense Student Training and Academic Recruit candidate from the University of Puerto Rico; the presidents of the American Society of Mechanical Engineers from Virginia Tech and the University of Virginia; and the valedictorian

at the Webb Institute, one of the nation's top naval architecture and marine engineering undergraduate schools. The student president and vice president of Carnegie Mellon's Society of Women Engineers were among those in the final-round interviews.

Although most candidates had three or four competing job offers on the table, the NAVSEA's NAIP acceptance rate was 70 percent—three times the acceptance rate experienced by federal agencies. Job offers were extended to successful final-round interview candidates within 30 days of their interview. This is a feat very few federal agencies can match.

Keeping Them at NAVSEA

Surveys of new NAIP hires indicate that preparation for the arrival of new hires is extremely important, so NAVSEA focuses on readiness and communication; and most important, NAVSEA ensures the new hires understand our end customer—the fleet. Our studies have shown that whenever NAVSEA's civilians are able to connect their work with the fleet and the Navy's mission, they are invigorated.

NAVSEA has a Distinguished Speaker's Program for new NAIP hires. The NAVSEA Distinguished Speaker Series began in the spring of 2005 with its inaugural speaker, Karl Rove, then deputy chief of staff to President George W. Bush. Since then, various members of Congress, directors of government agencies, a Supreme Court justice, and chief executive officers within industry have committed their time to this important Navy training program. Two recent speakers were retired Marine Lt. Col. Oliver North and former Secretary of State Madeleine Albright. The objective of the series is part leadership development and part opportunity for the new hires to meet important people. The Distinguished Speaker Series has been recognized by the director for acquisition career management for both its development and retention value to NAVSEA NAIP members. As such, it is integral to NAVSEA's recruitment efforts and will have a far-ranging impact on the command's future workforce.

NAVSEA's recruitment strategy has been a demonstrable resounding success and is leading towards an inspired, motivated, and increasingly diverse acquisition workforce. The NAVSEA's new NAIP hires are seeing how what they do serves the fleet, the government, and ultimately the world. NAVSEA's new NAIP hires want to be challenged, and NAVSEA is making sure that they are. You get only one chance to make a good first impression, and NAVSEA is making the best of that single chance.

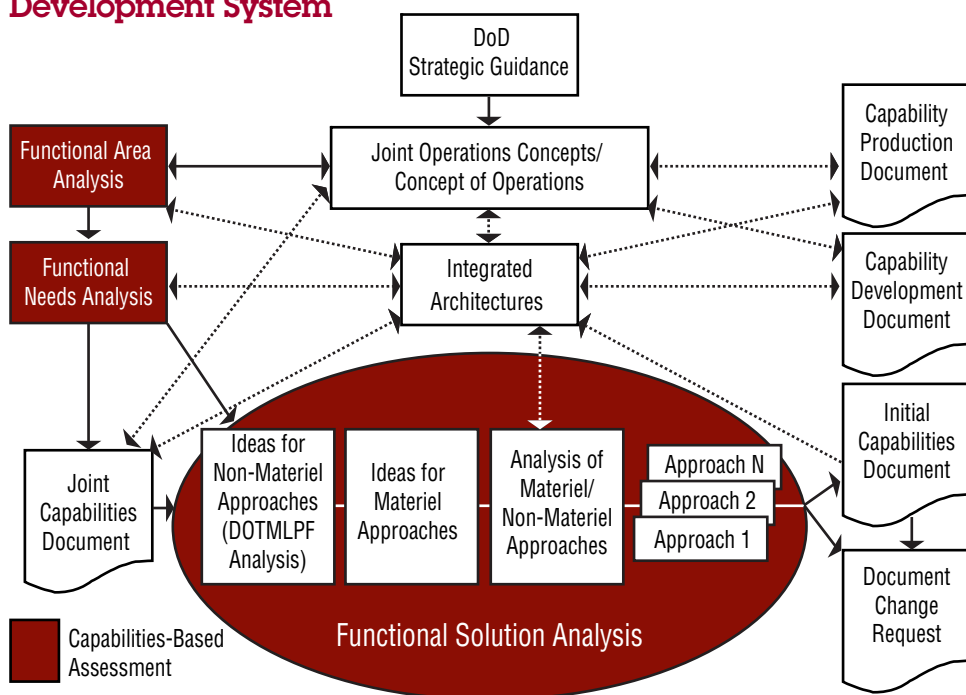
The author welcomes comments and questions and can be contacted at matthew.tropiano@navy.mil.

The Program Manager and the Acquisition Action Officer

Recent authorization act language has generated a renewed interest in the relationship between the Department of Defense's Service acquisition action officers—called Department of the Army systems coordinators in the Army, requirements officers in Navy and Marine Corps, and program element monitors in the Air Force—and the requirements and acquisition communities. This article focuses on the relationship between acquisition action officers at the service level and their respective service PMs.

Defense was directed to develop a training program to certify both military and civilian personnel of DoD who are assigned to positions responsible for generating requirements for major defense acquisition programs (MDAPs). The under secretary of defense for acquisition, technology and logistics, consulting with the Defense Acquisition University, will oversee the implementation of this training program. This new training curriculum became available to personnel at the end of September. The proposed outline for this training program will consist of a three-tiered approach: a basic and an intermediate online course, followed by an advanced resident course.

Figure 1: The Joint Capabilities Integration and Development System



The nature of the relationship between the acquisition action officers and the program office is not well understood by those within the acquisition workforce who are not directly involved in the formalized process of capabilities-based planning. Let's begin with an overview of the process, after which

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“By ensuring that everyone involved has a common understanding of the process, we can avoid misinterpretation of requirements and ensure we deliver warfighting systems that perform to the level required by the warfighter, are affordable, and are available when required.”

Maj. Gen. William J. Troy



we can return to a discussion of the relationship between the two key players involved in the delivery of capabilities to the warfighter.

Overview of the Requirements Process

DoD uses a capabilities-based assessment (CBA) approach to identify gaps in capabilities within its military forces. A capability gap is the inability to perform a task because of a lack of equipment, training, doctrine, or support. Examples of common capabilities gaps are:

- Being unable to determine enemy presence and intent
- Being unable to launch or to task a reconnaissance platform

- Being unable to download or apply reconnaissance information.

The Joint Capabilities Integration and Development System is used to identify and validate these capability gaps, as shown in Figure 1. This approach encourages the innovation, flexibility, and teamwork that are the essence of successful joint warfare in today's threat environment. CBA begins with identification of capability gaps. Instead of focusing on hardware, JCIDS focuses on interoperable solutions for the joint warfighter.

In a CBA, all involved are focused on ensuring warfighters have required capabilities by supporting three processes:

- Validation of capability gaps based on potential future missions with associated threats (JCIDS)
- Acquisition of capabilities the warfighters need (defense acquisition system)
- Budgeting for the necessary capabilities under appropriate resource constraints (planning, programming, budgeting, and execution).

To expand further, let's explore who is involved in those activities from a program office perspective.

External to the Program Office

As mentioned previously, acquisition action officers have different titles depending on the Service. No matter the Service, in nearly all cases, acquisition action officers are military members assigned to service staffs as part of their career progression. Their job is to facilitate the transition of capability gaps into the acquisition process. They must call upon their military expertise, balance the immediate needs with future capabilities, and fight the budget wars. Acquisition action officers must work closely with their Service requirements community to understand the warfighter's problems, needs, or gaps in capabilities. Their role is to translate those needs and problems into specific outcomes for the PMs so they can then move through the acquisition process.

For the acquisition action officer, the output of the functional solution analysis adjudicates whether a non-materiel or materiel solution will be pursued. Key to this process is answering the DOTMLPF question—that no changes to **D**octrine, **O**rganization, **T**raining, **M**aterial, **L**eadership and education, **P**ersonnel, or **F**acilities can provide a solution for the capability gap. Once these capabilities are identified as requiring a materiel solution, the acquisition action officer works with the acquisition community (program office) to identify the technologies needed to fulfill the needed capability.

Internal to the Program Office

The default solution to a capability gap is a non-materiel solution such as a change in doctrine. When a non-mate-

Obtaining the right solution to the capability gap for the warfighter is a team sport.

riel solution cannot be identified, the acquisition community becomes involved and a program office (or integrated product team within an existing program office) is chartered to develop a plan to deliver a technologically viable and affordable solution to resolve the capability gap.

Obtaining the right solution to the capability gap for the warfighter is a team sport. Neither the acquisition action officer nor the program office can deliver the solution without the trusted engagement of the other party working with the requirements community. The process of delivering a materiel solution is complex and is greatly dependent upon accurate communications and collaboration among these entities for the common good of the end users. With the direction provided in the FY 2007 NDAA, it would seem that DoD's acquisition action officers are struggling with their role or their relationship with their assigned program offices. To better understand how well typical acquisition action officers support the JCIDS process with their program offices, we structured a short survey and solicited inputs from a sample of acquisition programs across the various Services.

The questions we asked of the Service acquisition programs and their respective acquisition action officers focused around the interaction they had with each other when collaborating on providing the capability gap solution.

After receiving the inputs from the various PMs and acquisition action officers, we compiled the responses and identified the common themes and lessons learned. The results indicated a wide range of responses among both groups. This could be attributed to differences in services or, as the FY 2007 NDAA identified, that there is a true need for a formalized training program for those involved in the generation of requirements for major acquisition programs.

Program Office Perspective

The questions we asked the program offices focused on expectations from both sides and the mutual challenges to be overcome. In summary the program office perspective highlighted the following:

- Effective communication with the key program stakeholders is essential.
- The acquisition action officer must be a constant and accurate program advocate.

- The acquisition action officer needs to provide understandable (unambiguous), consistent (verifiable, traceable), buildable (feasible), testable requirements.
- The learning curves are steep for an acquisition action officer to understand his or her job and the roles of the acquisition community and the PM.

We also asked the PMs, "If you were to provide a key quote about the 'care and feeding' of your acquisition action officer, what would it be?" Their responses were as follows:

- Educate and communicate.
- The acquisition action officer is your friend.
- Trust your acquisition action officer with the good and bad of your program.

Acquisition Action Officer Perspective

The questions we asked the acquisition action officers focused on expectations from both PM and the acquisition action officer, training, and job responsibilities. In summary the acquisition action officer perspective highlighted the following:

- Have the program keep the acquisition action officer informed and connected with the program office.
- Foster accurate communications both ways and be proactive about it.
- It is more a question of what we can do to help each other and collaborate.
- Properly identify requirements and coordinate funding of the solutions.
- Training is available, but it is a constant struggle to keep up with new personnel.
- Excellent training is available for the acquisition action officer role and for acquisition processes (through DAU).
- Mentoring is mandatory.
- It takes one to 1.5 years for an acquisition action officer to become proficient.
- Training is available, but on-the-job training is the rule for coming up to speed.

One response stated, "The department is missing the boat in this respect; the greatest risk-reduction effort you can make is to produce good clean unambiguous requirements." Another said, "I don't know of a certification level for requirements folks. Big hole in the system here."

Key Points to Learn

After reviewing the responses from both a PM and an acquisition action officer perspective, several key themes emerge. The first is that accurate, timely, two-way communications are fundamental to the success in identification and avocation of any program. Along those same lines, the PM and the acquisition action officer must maintain good situational awareness of how the program appears from the others' vantage point. For this working relationship to truly be effective, there must be trust and the de-

Defense AT&L Executive Editor Retires



Judith M. Greig, managing editor and most recently executive editor of *Defense AT&L*, retired Sept. 30 after a career of more than 35 years in communications and publications management, 20 of those years as a self-employed writer-editor.

Greig became managing editor of the Defense Acquisition University's flagship publication in September 2003 and oversaw the extensive redesign and repositioning of the magazine as it changed from *Program Manager* to *Defense AT&L*. She brought a keen sense of wit and humor to the magazine that has gained the attention and approval of several senior Department of Defense officials. In January 2008, Greig became the executive editor of the magazine and the senior editor for the DAU Press.

Before coming to DAU, Greig served as an independent promotional writer and marketing consultant, with a wide array of clients in the telecommunications and technology industries. She was recognized with 16 awards for her promotional writing for the high technology marketplace. Until recently, she also served as an adjunct faculty member in the Department of English at Northern Virginia Community College. Greig has a bachelor's degree in Italian language and literature from the University of London in the United Kingdom and a master's degree in English literature from Wayne State University in Detroit, Mich., where she also taught.

In her retirement, Greig plans to travel in Europe, especially Italy. *Defense AT&L* will continue to benefit from her talents in between her travels, as Greig will support the magazine as a contributing editor.

There must be trust and
the desire for open and
honest engagement in the
partnership.

sire for open and honest engagement in the partnership. What is good for the program is good for the warfighter.

The last point to draw from these responses is that while some acquisition action officers obtain access to the training resources they need, it isn't consistent across the spectrum. Some acquisition action officers have to rely upon mentoring and on-the-job training as their primary means of coming up to speed in their role. Also, even in the best of circumstances, it is still a one to 1.5 years maturation period until they are comfortable and proficient in their role.

These PM and acquisition action officer responses are well aligned with the thoughts of Army Maj. Gen. William Troy, vice director J-8, Joint Staff. "By ensuring that everyone involved has a common understanding of the process," Troy says, "we can avoid misinterpretation of requirements and ensure we deliver warfighting systems that perform to the level required by the warfighter, are affordable, and are available when required." Furthermore, the acquisition action officer and the PM need to devote energy to fostering a good working relationship with the requirements manager, he notes.

The general's comments relate directly to the guidance provided DoD under the FY 2007 NDAA and why the under secretary of defense for acquisition, technology and logistics, along with DAU, is pursuing the establishment of the Requirements Management Certification Program. To better understand how the RMCP will support the requirements-generation community as well as benefit the acquisition and resourcing community, let's examine the structure of the training further.

New Learning Resources

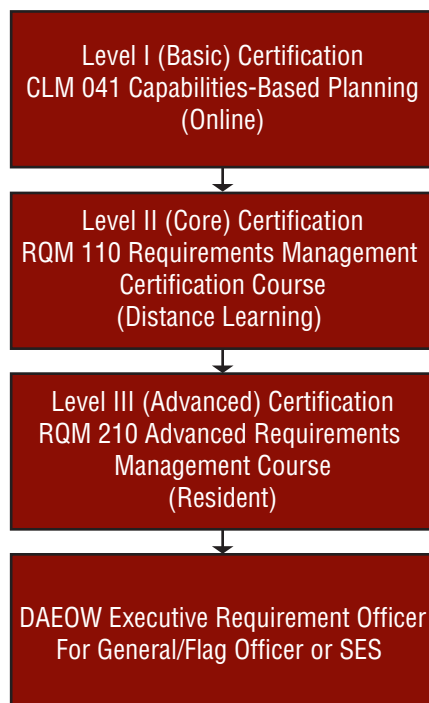
The first significant step in developing the training was to bring the requirements, acquisition, and resourcing communities together to establish the competencies associated with the requirements officer/requirements managers. To consider and leverage existing learning assets during the curriculum development methodology, DAU worked closely with the Services, components, and agencies to crosswalk these assets with the requirements management officer competencies. The goal was to target the action officer level in preparation for the development of the learning assets.

DAU created and developed a three-phased methodology (Figure 2) for deploying learning assets. The first phase, completed in October 2007, was the fielding of a continuous learning module titled Capabilities-Based Planning (CLM 041). To date, more than 2,400 requirements professionals have completed the course. A requirements community conference/workshop was held in August 2007. More than 60 requirements community members from the Joint Staff, combatant commands, Services, agencies, and the intelligence community attended the three-day session.

Phase 2 is the Core Concepts for Requirements (CCRM) Management Certification Training distance learning module, which went online in July. It will provide a robust treatment of acquisition and requirements lessons targeted for the requirements professionals. The course will address the full set of competencies that have been defined for requirements management personnel. As a distance learning course, instruction is self-paced. DAU instructors will be available to clarify course materials and concepts, if required

The basic and core requirements management training certification courses will be the foundation to meet the minimum statutory requirements set by Section 801 of the FY 2007 NDAA. Section 801 requires “the under secretary of defense for acquisition, technology and logistics, in consultation with the Defense Acquisition University, to establish competency requirements and a certification training program to improve the ability of civilian and military personnel of the Department of Defense to generate requirements that are added to Major Defense

Figure 2: Requirements Training and Certification Concept



Acquisition Programs (MDAPs).” The next step, phase 3, will consist of the development of both an advanced resident training course and an executive course.

The advanced requirements management course will be classroom training for requirements writing team supervisors, team leaders, and other key requirements process owners within DoD. It is not required for certification. It will use case studies and exercises to strengthen analysis, evaluation, and decision making associated with defining, managing, and resourcing capabilities for service members. DAU will develop the course in 2009.

The executive course will provide an alternative certification for flag and general officers and senior civilian officials. This course is offered either at DAU or at other locations, depending on need, and began in September 2008.

A Common Understanding

Successful outcomes within DoD’s acquisition system begin with the requirements community identifying, validating, and prioritizing well-defined and well-understood capability needs. This necessitates continual engagement with the acquisition and resourcing communities throughout the acquisition life cycle. Therefore, as DoD stands up this training program for requirements professionals, it is essential that the participants within “Big A” acquisition understand the process for translating requirements into all of the required acquisition for delivery of capabilities to DoD’s Service members. This will continue to be a key challenge to all of the requirements-generation team because future requirements development will occur in a fiscally constrained environment.

Our hope is that this article helps improves the dialogue and efficiency between the PM and the acquisition action officer members of the process and that the comments provided aid in the development of a true team sport approach.

Acquisition action officers must work closely with their Service requirements community to understand the warfighter’s problems, needs, or gaps in capabilities.

The authors welcome comments and questions and can be contacted at william.broadus@dau.mil, duane.mallicoat@dau.mil, pam.schuyler@dau.mil, patrick.wills@dau.mil, and jane.odea@dau.mil.

DoD Plans for the Contracting Future

The Contracting Competency Model

Leonardo Manning ■ Mary Thomas ■ Teresa Brooks

The Department of Defense's contracting workforce, which includes all civilian members assigned the 1102 job series code and military members who are reported as performing contracting duties, has been relatively stable from 2001 through 2007. The contracting workforce currently consists of 22,345 members out of the 126,033 professionals who make up the acquisition, technology, and logistics (AT&L) workforce.

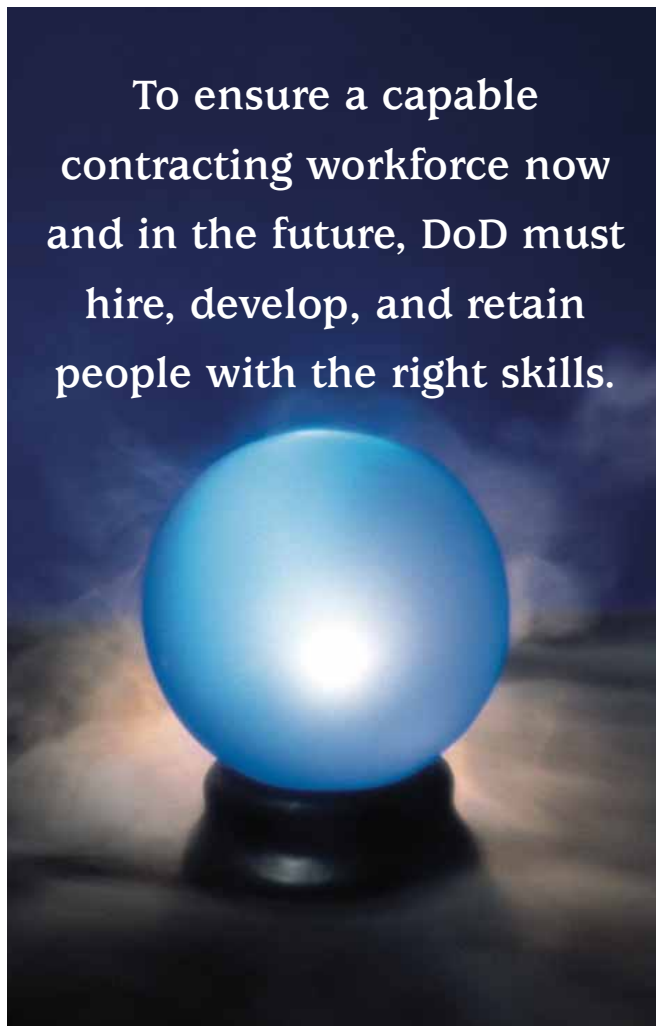
Although the size of the contracting workforce has been stable since 2001, significant mission demands—such as the ongoing Global War on Terrorism—as well as the pending departure of the Baby Boomer workforce warrant a review of the appropriateness of the current workforce size and its skills. From 2001 to 2007, the number of contracting actions involving more than \$100,000 has increased by 62 percent, while the corresponding dollars being obligated increased by 116 percent. Additionally, 73 percent of the DoD civilian contracting workforce is part of the Baby Boomer generation or is older.

From 2001 to 2007, there were 3,589 professionals hired into the 1102 job series, which makes up 19 percent of the contracting workforce. While these hiring statistics appear favorable right now, DoD still needs to consider the future skill levels it needs. Overall net hiring and retention levels may need to increase in order to maintain (or increase) DoD's current civilian strength level through 2016.

Contracting Competency Management

To ensure a capable contracting workforce now and in the future, DoD must hire, develop, and retain people with the right skills. The Office of the Under Secretary of Defense for Acquisition, Technology and Logistics; the Office of the Deputy Under Secretary of Defense for Civilian Personnel Policy; the Defense Acquisition University; DoD functional leaders (e.g., the director, Defense Procurement, Acquisition Policy, and Strategic Sourcing [DPAP]); and DoD components are collaborating to develop responsive workforce strategies. One strategy includes using improved data

To ensure a capable contracting workforce now and in the future, DoD must hire, develop, and retain people with the right skills.



analysis tools and a scientific-based competency modeling and skills assessment process to analyze current and future workforce capabilities.

In March 2007, DoD completed development of a comprehensive contracting competency model that defines behaviors and underlying knowledge, skills, and abilities

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required for superior job performance for the contracting workforce. Leaders of the contracting career field supported the effort by developing a competency framework, encouraging the support of the senior leadership, communicating the project to the workforce, and assisting in data collection workshops.

The contracting competency model was developed using a three-step process that collected input from contracting functional leaders and 377 subject matter experts from across the contracting career field. In step one, an expert panel of functional leaders worked together with a research staff from the Center for Naval Analysis (CNA) to discuss the competencies needed to succeed as superior performers in the contracting workforce. An offshoot of the Contracting Functional In-Process Team served as the expert panel and was made up of experts from across the DoD from the Army, Navy (including the Marine Corps), Air Force, National Guard, Defense Logistics Agency, Defense Contract Management Agency, Defense Information Systems Agency, and the Office of the Secretary of Defense. In this step, the expert panel helped to frame the contracting jobs, and to identify and communicate with subject matter experts (SMEs) chosen to participate in the next stage of data collection.

The expert panel members were asked to describe how their particular career field is organized and what functional areas make up their job. In addition, they provided some baseline legacy competencies. These competencies and functional areas were combined to draw up a draft framework of the jobs that make up that particular career field. Jobs were then organized into large functional areas named units of competence. The competencies within each unit of competence have a related set of task, tool, and knowledge items.

At the starting point of the contracting competency effort, the career field had already undergone extensive study to determine competencies for the contracting career field. Therefore, extensive historical documentation provided the most solid starting point of any career field to date. The expert panel and CNA research staff also compiled historical legacy data and related competency models for the contracting career field. As a final review, AT&L community leaders reviewed these competencies to ensure that the descriptive work groupings were both accurate and complete. Additional modifications were incorporated as needed.

The expert panel developed an initial hypothesis about which competencies are required to successfully perform the job. This starting point provided the researchers a logical way to present the data for the model to the SMEs in the field. It also provided a competency structure to be tested through quantitative and qualitative analysis of SME input.

Collecting Subject Matter Expert Data

The expert panel's second task was to identify the SMEs to be interviewed in the next step. Each expert panel member provided a minimum of four experts per component or agency per career level to ensure the workforce mix was well represented. In addition, the experts provided SMEs that represented a diverse mix of contracting roles and responsibilities. The SMEs chosen by the expert panel members were superior performers with more than two years of experience and who demonstrated the ability to communicate effectively regarding the competencies needed to complete their job clearly and without using jargon. The contracting career field was especially devoted to this task, providing up to 25 SMEs per panel member. Adequate sampling of a workforce of this size calls for a sample of between 350 and 400. Each career field also designated a functional leader who has proven contacts across the community, as well as a knowledgeable operational advisor to aid in rolling out the intricate logistical requirements associated with each data collection effort. The contracting career field used a functional career field leader and operational leader to manage logistical details and help keep the project on task.

In total, 377 SMEs participated in the sessions. Of the 377 SMEs, 95.2 percent were from DoD, while the remainder were from civilian agencies. Each of the major military services provided approximately equal subject matter expert representation, and there was significant participation from organizations like the Defense Logistics Agency, the Defense Contract Management Agency, the Defense Information Systems Agency, and the Defense Commissary Agency. A majority of the SMEs were ranked at the senior level, (50.9 percent), with 32.4 percent at the journeymen level, 8.5 percent at entry level, and 8.2 percent were not yet certified.

In step two of the methodology, SMEs chosen by the expert panel were asked to provide information about what they do on the job that makes them successful. This information was broken into three parts:

- Preliminary validation survey
- Key situation interviews
- Review of job tasks, tools, and knowledge.

Each part was critical to evaluating the requirements of the job, the criticality of those requirements, and what actions are required for superior performance. Using a Web-based data collection tool designed by CNA, SMEs stepped through a structured set of interview questions. Each part of the data collection served to validate the other and provide the qualitative and quantitative data to identify the competencies required for superior performance, the structure of the competency model, and the criticality of the competencies for various workforce components.

Contracting Competencies

Technical Competencies

- Determination of how best to satisfy requirements for the mission area
- Consider socio-economic requirements
- Promote competition
- Source selection planning
- Solicitation of offers
- Responsibility determination
- Bid evaluation (sealed bidding)
- Proposal evaluation (contracting by negotiation)
- Source selection
- Contract award
- Process protests
- Justification of other-than-full and -open
- Terms and conditions
- Preparation and negotiation
- Advanced cost and/or price analysis
- Initiation of work
- Contract performance management
- Issue changes and modifications
- Approve payment requests
- Close-out contracts
- Addressing small business concerns
- Negotiate forward pricing rates agreements and administer cost accounting standards
- Contract termination
- Procurement analysis
- E-business and automated tools
- Activity program coordinator for purchase card
- Construction/architect and engineering
- Contracting in a contingent and/or combat environment

Professional Competencies

- Problem solving
- Customer service
- Oral communication
- Written communication
- Interpersonal skills
- Decisiveness
- Technical credibility
- Flexibility
- Resilience
- Accountability

In the first section, SMEs were asked to provide ratings about the work functions required for the job. Each SME was presented with the framework developed by the expert panel. They rated the importance, frequency, and level first needed for each of the technical functions of the job. The quantitative data collected in this step tested the hypothesis of the framework developed for the career field. This data were used in analysis to decide the structure for the competency model, the criticality of com-

petencies that are derived for the career field (and for various workforce components), and the point in their career that the competencies contribute most to superior performance.

In addition to asking about task-oriented information, the key situation technique was used to allow the SMEs to talk about their performance on the job. SMEs were asked to describe a situation or experience when they felt particularly confident on the job and that resulted in an effective outcome. Each SME wrote one to two situations and then provided associated ratings detailed in the next two subsections.

This effort resulted in a large amount of data that could be used to develop a competency model for the Contracting career field. Over 600 key situations were collected from the SMEs who participated in the study. Those situations provided the elements and key behaviors required for superior performance. CNA analysts reduced the content of the situations into behaviors required for success.

After writing about a situation, SMEs were asked to identify which units of competence were associated with the event and allowed the SME to connect the job to the key elements of superior performance in resolving the situation. Lastly, each SME was asked to rate the professional competencies needed in the specific instances. Professional competencies were found to be the primary topic in which SMEs said were critical when they wrote the key situations.

Each SME was then asked to build a competency model for his or her job by following the three tasks detailed below:

- **Choose the units of competence related to your job.** Each SME was first asked to think about his or her job as a contracting professional and decide which main units of competence were applied during the past 12 months.
- **Review the work functions that belong within each unit of competence.** SMEs were asked to review the work functions associated with the units of competence that they had selected as crucial to their job. The list of work functions was created by the expert panel to cover the range of competencies utilized by this career field.
- **Detail the tasks, tools, and knowledge for each work function, giving more depth to the competency.** Each SME was then asked to add tasks, tools, and knowledge within each competency area and unit that he or she felt was missing or misstated.

The contracting competency model resulting from this process includes 11 units of competence, 28 technical competencies, 10 professional competencies, and 52 final elements with supporting knowledge. The elements

The contracting competency model was developed using a three-step process that collected input from contracting functional leaders and 377 subject matter experts from across the contracting career field.

provide the detail needed to assess an individual on the competencies. The key behaviors also provide additional information on how the elements and competencies were derived. The model serves as the cornerstone of a human capital strategy to identify and fill capability gaps.

Validating the Findings

The final, third step of the competency development process consists of a survey/assessment to validate the model in terms of each competency's importance, the observed frequency of competency-related behaviors, the level to which a competency is needed, and proficiency levels. A significant portion of the information needed to conduct the final validation survey has already been captured in the model development process. Step three will not be fully completed, however, until completion of a DoD-wide contracting competency assessment.

The contracting competency model provides the foundation for assessing the contracting workforce. The following guiding principles were applied throughout the competency development process in order to meet this human capital need to best assess the acquisition workforce:

- Competencies are observable and measurable.
- Competencies are based on superior performance on the job.
- Competency models include both the technical and professional competencies.
- Competency models are composed of both knowledge, skills, and abilities, and other individual characteristics.

Beginning in August 2007 and continuing through July 2008, DoD used the contracting competency model to conduct a contracting competency assessment of all mili-

tary and civilian members of the DoD-wide contracting workforce. Results of the contracting competency assessment will be finalized during the first quarter of fiscal year 2009. Those results will provide a complete inventory of competencies that exist in the DoD-wide contracting workforce, identify current and projected competency gaps, and support workforce development in ways to best fit the strengths and weaknesses of the workforce and the needs of the contracting mission. Information gathered from the assessment will provide insight and answers to a number of workforce-planning issues such as:

- What competencies are most critical to successful performance?
- What capabilities and gaps exist in the current workforce?
- What best practice methods/changes should be implemented to address capabilities/gaps that exist?
- What areas should DoD focus on for future talent?
- What areas are at risk due to attrition and retirements?

The answers to those questions will assist the contracting community in identifying solutions to shape the workforce of the future.

Shaping Training Opportunities

In addition to developing and assessing competencies, the senior leaders of the contracting community are working together to identify and implement strategies to address opportunities for future training and development to close competency gaps identified by the contracting competency assessment. DAU is developing a way to match contracting competencies to DAU learning assets. This will allow for the identification of training gaps and support the development of individual development plans for those in the contracting workforce.

The Future Contracting Workforce

Updates to strategic plans are in work for the contracting workforce. By using key data provided from the contracting workforce assessment and from the components, and by linking this data to drive workforce planning solutions, the DoD-wide contracting community will work to develop a coordinated workforce plan for the contracting community that defines its current state, future state, and a five-year plan to accomplish gap-closure strategies. By working together with the components, DoD can create a global perspective of needs and solutions, and can identify opportunities to create efficiencies and share best practices across the workforce. In addition, the community can better meet future requirements and respond to its stakeholders.

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Risk, Uncertainty, and Trouble

Escaping the RUT of Program Instability

Col. Brian Shimel, USAF

When we say we are stuck in a rut, we imply our often repeated actions are forced on us by things outside our control. As if to say, we are not really as crazy as we look. But what if we build our own rut and then act as if we have no choice?

When we talk about things that will happen in the future, we must remember those things have not yet happened. Because they have not happened, we must allow for the possibility they may happen differently from the way we expect, at different times, or not at all.

We cannot relieve ourselves of the need to plan for the future just because the future is uncertain. For our plans to be reasonably accurate and reliable, it is prudent we base them on rational analysis and not on wishful thinking. Unfortunately, we do not always think clearly about the future. Our assumptions are often clouded by lapses of judgment, eternal optimism or dark pessimism, and trepidation about admitting risk and uncertainty to those around us. In many instances, we shy away from accepting the full impact of risk and uncertainty on future conditions because we become overly concerned that our ideas will be rejected unless we can guarantee successful results.

When we talk about the future, “risk” is the term used to discuss a possible negative outcome of an unfavorable event or action, while “uncertainty” refers to the unknown variability around a prediction of a future state. Potential risk causes us to set aside resource reserves to help overcome possible setbacks. Uncertainty causes us to make assumptions about what may happen and estimate how valid our assumptions will prove to be. Risk and uncertainty are not what get us into trouble. We get into trouble when we ignore, or unwisely discount, risk and uncertainty. I call that Risk, Uncertainty, and Trouble—and it is a RUT of our own making.

Making Assumptions

The Department of Defense is upgrading and improving its capabilities. To fund this investment, the department is looking for efficiency and taking reductions across all areas of operations. It is vitally important we understand



“However beautiful the strategy, you should occasionally look at the results.” —Winston Churchill

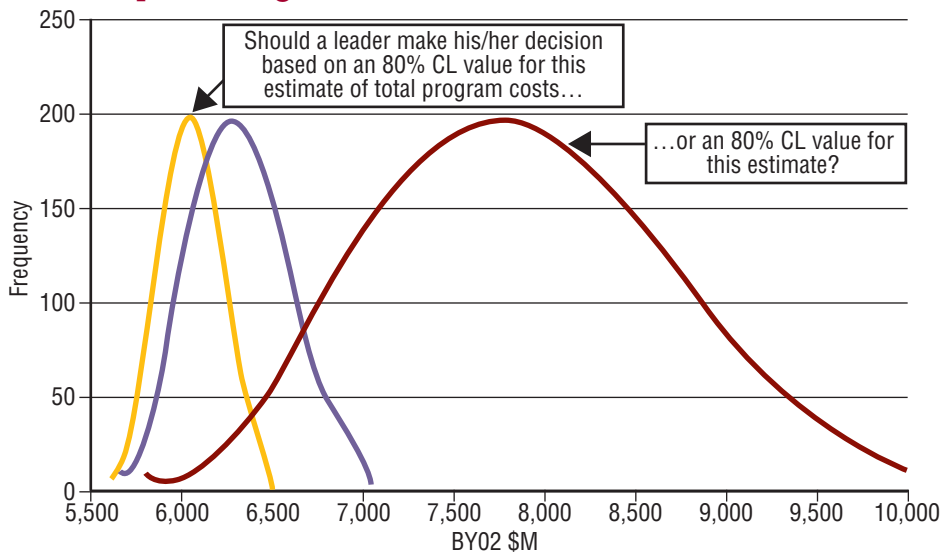
how our modernization money is being spent so we can get the best possible results from our investment and minimize the impact to the rest of the department.

Financial instability is a problem. Budgets are tight, the pace of operations is high, and short-notice changes pop up against a list of requirements. Leaders in acquisition are trying to insulate programs from financial instability. To avoid overruns, they have asked for extra funding to reach a higher confidence level in costs and scheduling. Many acquisition programs have moved from funding at the traditional 50-percent confidence level estimate to an 80-percent confidence level to provide better budget stability and avoid costly program failures.

The biggest problem we have in establishing a baseline and predicting the cost of a weapon system to develop and deliver it to the warfighter is that we know too little about the undeveloped weapon system and the difficulties we are going to face getting it into the field. While it may be human nature to worry excessively about things

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Actual Space Program Cost Distribution



we do not understand well, another common reaction is to discount the impact of uncertain challenges.

Even with the well-documented loss of organic cost analysts, we still often perform reasonable, initial analyses of risk and uncertainty. The RUT of program instability is caused more by our resistance to fully communicating risk and uncertainty to decision makers than by our lack of ability to capture it. As information is entered into our approval and decision-making system and rises through the corporate process, the underlying risk and uncertainty are often watered down in a series of negotiations forced by severe budget, time, and resource competition. We fear that risk or uncertainty will weaken our chance to gain funding or approval for our proposed course of action, and we back away from clearly expressing measures of risk and uncertainty that are subjective by their very nature.

Like it or not, the system drives us towards a point estimate, and when a budget is laid in against it, all future programmatic success or failure is measured against what is only a reasoned compromise. Time and time again, that is what gets us into trouble.

Embracing the Full Picture

One reason we shy away from fully explaining risk and uncertainty is that they are perceived as bad news. We often discount their very existence or impact. Failing to embrace the true condition of any situation leads to a cycle of mistaken assumptions and improper priorities that can sabotage a manager's chance of addressing the real issues, and the chain of command's chance to provide meaningful support early enough to make a difference.

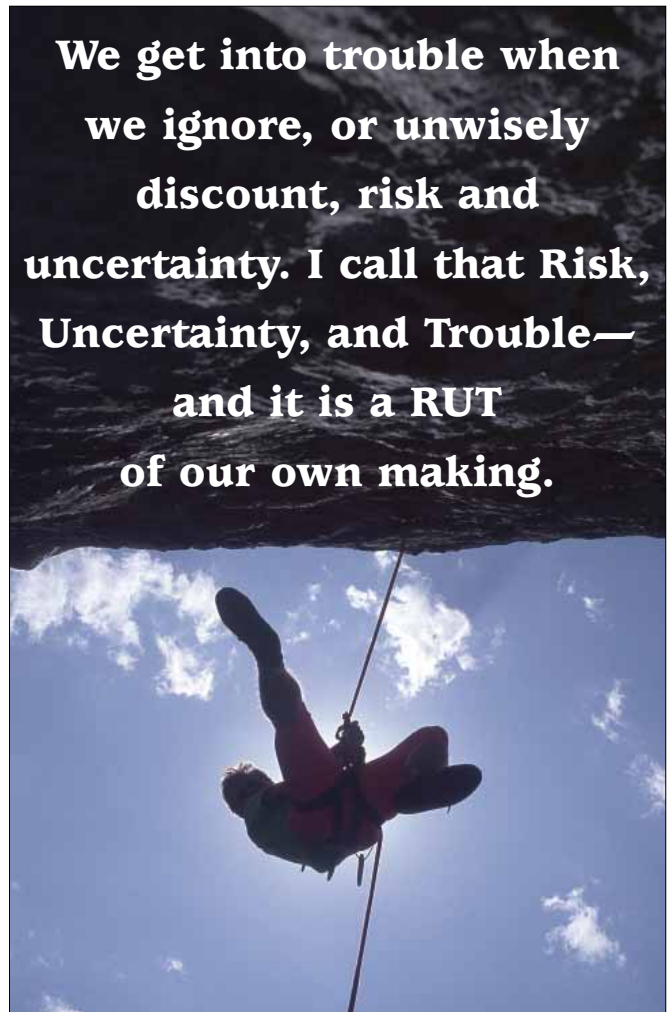
Assumptions must be correlated with evidence in order to build a realistic baseline. If we are to avoid the RUT of program instability, we must accurately describe the uncertainty and risk a program faces, and we must ad-

dress those items. That is how we will gain the smooth traction of high-confidence acquisition programs.

For example, if we develop a plan to solve a technical problem and give ourselves a reasonable time to accomplish the task, we tend to discount the risk involved in actually solving the problem. As schedule risk and technical risk are highly correlated, this tendency leads us to assume away a significant portion of the risk by planning a development timetable that appears reasonable to us but, in many cases, is not when seen in the context of what must be accomplished and in the context

of real-world capabilities. So, we end up underestimating that portion of the risk. Next, we estimate the 80 percent confidence interval of a fraction of the risk—the risks associated only with the estimating equations—and declare we have 80 percent confidence in the development

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estimate. When we minimize the risk and uncertainty of our program to the approving officials in our chain of command, they make biased decisions based on “optimistic assumptions” (our current euphemism for poor judgment).

Getting into Trouble

Because of the amount of risk and uncertainty inherent in a weapons system development program, the amount of extra money needed to go from a 50 percent confidence that the program will not exceed a certain cost to a higher confidence level is often unaffordable. For example, look at the Actual Space Program Cost Distribution figure on the previous page, which illustrates three different estimates made of its total cost.

The scale of the figure is millions of fiscal year 2002 base year (uninflated) dollars. The contractor bid to deliver this program at a stated 50 percent confidence that the cost would be \$6 billion or less. Given the narrow range of uncertainty assumed by the contractor (the yellow line), it would take only another 3 percent of funding to gain 80 percent confidence that the program would finish at or under \$6.2 billion. The program office did its own estimate and predicted that the cost of delivery would be approximately \$6.4 billion at 50 percent confidence (the blue line). Given the program office’s assumed uncertainty, it would take only an extra 6 percent of funding (\$400 million) to reach 80 percent confidence. The program then went through an independent review. The independent cost estimate predicted a cost of \$7.7 billion with another 10 percent, or \$8.5 billion, to reach 80 percent confidence (the red line).

Many would look at the range of costs developed for the independent review as being surprising when compared to the earlier estimates. It is easy to imagine the program office and contractor complaining bitterly that the independent estimators did not fully understand their cost-saving initiatives and managerial skill.

And it turns out, the independent estimators were wrong: Even *their* distribution was far too narrow. In fact, when predicting the price of a commodity as simple as a carton of eggs five years into the future, there is a standard error of 15 percent.

Because one standard error represents roughly the difference between 50 percent and 80 percent confidence, in order to be 80 percent confident that you will have enough money to pay for a dozen eggs five years from now, you will need to hold 15 percent more than the expected price. Now imagine how much larger the standard error is for our sophisticated, state-of-the-art weapon systems that will take more than a decade to develop and procure. Because the example in our graph is based on real numbers, you might be curious to know that the latest cost estimate for the program exceeded \$13 billion before it was de-scoped. But it’s not all about the cost estimate!

The cost growth in this program was the result of optimistic assumptions associated with technology levels, integration complexity, and cost. Risk and uncertainty were underestimated and the program was funded at something less than even the 50-percent confidence level.

It does not mean the cost estimators should have estimated an 82 percent increase in costs to go from 50 percent confidence to 80 percent. Successfully bounding

Strongly and clearly communicating risk and uncertainty up the chain of command will help leadership make better strategic decisions.



the upper limits of a program estimate requires programmatic control, not throwing good money after bad. The summary purpose of that example is to show that nobody fully understood or communicated the cost and technical risk associated with the program. Decision makers were hamstrung by poor information and a culture of optimistic assumptions. We got into this trouble by minimizing the risk and uncertainty of new technology that was being developed for this system.

Keeping an Eye on the Customer

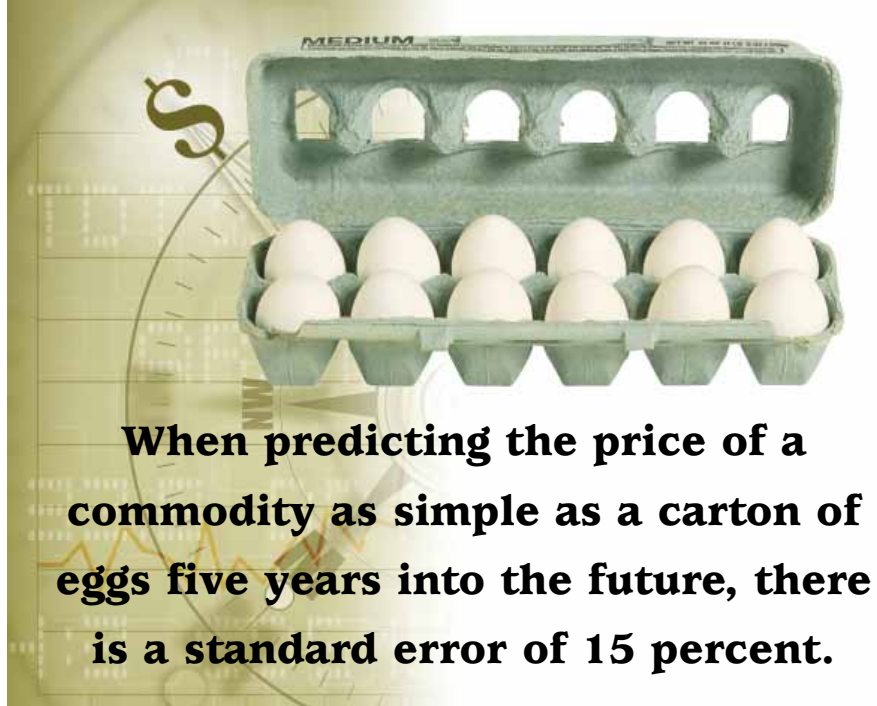
Sometimes we have good reasons for rushing things to the field. An extremely important part of this discussion must be that new programs are often built from urgent warfighter needs. There is no way anyone in the business of DoD weapon systems development wants to let our troops in theater down! Both in the heat of the battle and in the heat of getting better capabilities to those in the battle, cost and schedule risks are all too often understated under the pressure of mission accomplishment. It is a disservice to our leadership to think they won't accept the risks if we communicate them and let them debate whether the potential benefits are worth it—or not.

Accept and Control, Not Escape

Risk and uncertainty are perceived as bad news. We fight risk and uncertainty tooth and nail. It would be wiser to consider risk and uncertainty as a giant rubber band—the more you pull away from them, the harder they pull back on you. Failing to admit that things may not proceed exactly according to plan is a recipe for trouble. Many things in our business are unknown and will stay unknown until we attempt to execute a program. After all, don't we try to put state-of-the-art technology into new weapon systems?

We are developing risky technology on aggressive schedules and claiming stable management environments. It just doesn't make sense. Adding money to the top line of an effort that is not fully understood is prohibitively expensive. Optimistic assumptions must be correlated with evidence in order to build a realistic baseline.

It is a disservice to present a decision maker with an estimate for a new groundbreaking weapon system that claims the system can be developed for a certain price and that the confidence can go from 50 percent to 80 percent confidence with only a 3 percent or a 6 percent increase in funding. And it is foolhardy for a decision maker to accept that estimate.



When predicting the price of a commodity as simple as a carton of eggs five years into the future, there is a standard error of 15 percent.

The decisions that make a system affordable must be based on more than wishful thinking. We should be straightforward about the risk we are proposing to take on. Strongly and clearly communicating risk and uncertainty up the chain of command will help leadership make better strategic decisions. That will result in improved use of resources and greater combat effectiveness. If we are to get out of our RUT, the first step will be to recognize we are *in* one. We should be motivated to take the risk of communicating better and more balanced information to decision makers. Not every idea is worth a full-scale development effort, and there is nothing wrong with admitting that. We must think clearly about uncertainty and risk, and we must fight the temptation to discount those factors when communicating the real conditions of our management situation. We don't get in trouble because of risk and uncertainty. We get in trouble for not admitting to ourselves—and those who rely on us—all of the risk and uncertainty that inherently exist in everything we plan to do.

Note: Between December 2007 and August 2008, the price of eggs increased by more than 30 percent!

The author is especially indebted to assistance from Jay Jordan, technical director of the Air Force Cost Analysis Agency. The graph is from Jordan's excellent briefing, "Cost Estimate Quality and Confidence."

The author and Jay Jordan welcome comments and questions and can be contacted at brian.shimel@hanscom.af.mil and jay.jordan@pentagon.af.mil. (Please send the hard questions to Mr. Jordan!)

Metaphors Are Mindfunnels

Finding Neo

Maj. Dan Ward, USAF ■ Maj. Chris Quaid, USAF ■ Capt. Gabe Mounce, USAF

Reading Mark Johnson and George Lakoff's book *Metaphors We Live By* felt like the scene from *The Matrix* where Neo meets Morpheus for the first time. After just a few pages, we were suddenly and vigorously aware of previously hidden layers of reality. They had always been quietly present, but now they were glaringly obvious—and frankly, they made our heads hurt. To borrow a phrase from that movie, Lakoff and Johnson's book freed our minds, and as Neo discovers, getting one's mind freed can be an uncomfortable experience.

The basic concept behind *Metaphors We Live By* is that metaphors are the fundamental construct of human thought. This concept was not entirely new to us, but we quickly discovered that the scope and scale of humanity's reliance on metaphor is shockingly large. The book explains that metaphors do not simply make things more interesting or easier to understand—metaphors actually *are* understanding, and it is almost impossible to think in non-metaphorical terms.

After showing that virtually all our thoughts and understandings are based in subtle, often hidden metaphor, Lakoff and Johnson go on to explain, "The primary function

of metaphor is to provide a partial understanding of one kind of experience in terms of another kind of experience."

The key word here is "partial." No metaphor is a complete and comprehensive representation of reality.

Lakoff and Johnson then show that not only do metaphors provide partial understanding, but "a metaphorical concept can keep us from focusing on other aspects of the concept that are inconsistent with that metaphor ... *a metaphorical concept can hide an aspect of our experience*" [emphasis added]. That's a pretty big deal, and it's why we wrote this article.

Metaphors: All Around Us

In *The Matrix*, Morpheus explains the situation this way: "The Matrix is everywhere. It is all around us. Even now, in this very room. You can see it when you look out your window or when you turn on your television. You can feel it when you go to work ... when you go to church ... when you pay your taxes. It is the world that has been pulled over your

"Have you ever had a dream, Neo, that you were so sure was real? What if you were unable to wake from that dream? How would you know the difference between the dream world and the real world? Welcome to the real world."

Morpheus, from *The Matrix*

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eyes to blind you from the truth ... That you are a slave ... Like everyone else, you were born into bondage. Into a prison that you cannot taste or see or touch. A prison for your mind."

The metaphors we live by may not be as sinister as the Matrix's mindprison, but they are just as ubiquitous, subtle, and powerful. As we continued to read the book, we developed a metaphor of our own: Metaphors are mind-funnels. That is to say, metaphors limit, filter, obscure, or even alter the informational inputs we receive from the world around us. We therefore understand our environment differently depending on the metaphors we use. This matters profoundly because the way we understand our environment affects the way we behave.

The challenge, therefore, is to recognize our mental metaphors, understanding them for what they are—subjective, incomplete descriptions that reveal some aspects of the world and obscure others. The metaphorical nature of our understanding means we might be able to expand our understanding and improve our actions by using multiple metaphors to illuminate different facets of reality. That is to say, smart use of metaphors can help us see through the Matrix.

The simplest metaphors are perhaps the most difficult to recognize and the most difficult to change because they are so fundamental to the way we see the world. For example, the common orientation metaphor more is up drives our perception that a larger number is higher than a smaller number. We talk about the stock market rising, gas prices going up, or an increase in our production numbers—all without being conscious that we are thinking and talking in metaphor. Nine is actually not higher than seven in a physical sense. It is simply a larger quantity, and physical height has nothing to do with it. We talk about it as being higher only because of our more-is-up mental metaphor.

As Lakoff and Johnson explain, it is sometimes "difficult to see that there is anything hidden by the metaphor or even to see that there is a metaphor here at all. This is so much the conventional way of thinking about language that it is sometimes hard to imagine that it might not fit reality." That explanation almost perfectly parallels Morpheus' description of the hidden, ubiquitous nature of the Matrix.

It turns out even a simple orientation metaphor reveals some things while hiding others. *More is up* emphasizes a particular aspect of having more (height), while concealing other aspects of increased quantity, such as weight, inertia, or complexity. It would be perfectly logical to use a *more is heavy* metaphor and talk about nine being weightier than seven instead of higher than seven, or the stock market getting heavier by 10 points instead of

going up by 10. This example is relatively innocuous, but other apparently simple metaphors can have significant implications.

We have all heard the old chestnut about how every problem looks like a nail when your only tool is a hammer—a metaphorical example of the influence of metaphor. But even perceiving a situation as a problem in the first place is an example of unconscious metaphorical thinking, using the *situation is problem* metaphor. When we see a problem, we naturally seek a resolution. But if we perceive the situation as something other than a problem, we will understand it differently and respond to it differently.

The *situation is symptom* metaphor would lead us to seek underlying causes instead of seeking the solutions required by the "situation is problem" framework. Similarly, the *situation is opportunity* metaphor leads to quite a different type of behavior. Other possible metaphors include *situation is obstacle*, *situation is non-problem*, *situation is data point*, *situation is educational opportunity*, or *situation is battle*. In each case, the metaphor reveals some aspects while concealing others. In each case, the metaphor drives our understanding and our behavior in response.

Metaphors and Behavior

When simple metaphors are combined into complex metaphors, the implications and ramifications broaden and deepen. For program managers, multi-layered organizational metaphors are particularly important. Organizational metaphors are powerful because they affect so many different interactions and patterns of behavior. An organizational metaphor determines how we interact with the people in the organization; how we represent the organization to the outside world; and how we understand what the organization needs, does, and provides. Now we arrive at the real challenge, the real danger, of failing to see through the Matrix.

Lakoff and Johnson write, "A metaphor may ... be a guide for future action. Such actions will, of course, fit the metaphor. This will, in turn, reinforce the power of the metaphor to make experience coherent. In this sense metaphors can be self-fulfilling prophecies."

Metaphors are powerful mindfunnels indeed!

The *organization is machine* metaphor, for example, logically leads to a series of additional metaphors, such as *employee is cog* and *objective is optimization*. This particular mindfunnel leads us to "run" our organization like a machine, and so see even its most human behavior as machinelike.

When we view our organization as a machine, we logically value efficient production and aim to minimize friction within the organization. Accordingly, we take actions de-

signed to increase efficiency. A machine requires input, guidance, and a way to overcome unnecessary friction as it produces some output. If our driving metaphor is *organization as machine*, that's what we give it.

In *The Matrix*, the machines have taken over and turned humans into living batteries, slaves to their own creations. The film's "human is battery" metaphor can be viewed as simply taking the "organization is machine" metaphor to its logical conclusion. All too many organizations do precisely that, feeding off their "human resources" (metaphorically speaking, of course).

In contrast, the *organization is team* metaphor leads to a different set of sub-metaphors, such as *employee is teammate* and *experience is practice*. Unlike machines, teams are coached instead of run. A team requires communication, training, and encouragement; it values cooperation, sportsmanship, and intrinsic motivation. You can quickly see how these two different metaphors lead to divergent behaviors and outcomes.

On a larger scale, organizational metaphors describe the soul of an organization—which is itself a metaphorical phrase, based on the *organization is a person* metaphor. As previously mentioned, even thinking about metaphor requires metaphor, which can be quite disorienting.

The word organization itself has metaphorical roots. In biology, an organ is a distinct entity that performs a specific function in the body. So we talk about *organ-izing* a group of people, i.e. turning the group into an organ with a distinct structure and function. Thus, the concept of an organizational metaphor is itself built upon a nearly invisible *group is organization* metaphor. But a group does not have to be viewed as an organization. There are other metaphors we could use, other mindfunnels to peer through.

Like all metaphors, *group is organization* illuminates a portion of the reality about that group and hides other

aspects. When we think of a program office as an organization, we unconsciously make certain assumptions about its function, structure, and priorities. However, we could just as easily justify using *group is republic* for a program office, instead of viewing it as a machine or a team or even an organization. In that construct, we no longer think in terms of teammates, cogs, or functions. Instead, we find ourselves surrounded with citizens who have rights, roles, and responsibilities, and who perhaps might even vote. The oft-repeated phrase "this office is not a democracy" would be completely out of place in a program office viewed through the group is republic metaphor.

Increasing Understanding

We don't presume to dictate which metaphor(s) program managers should use for any given situation or group. Instead, we are content to simply make people aware of the fact that humans think in metaphors, and point out that metaphors are mindfunnels, which illuminate some aspects of reality and conceal others.

A metaphor can be useful or counter-productive, good or bad, and even among the good ones, some are better than others. While we can't offer up a particular metaphor as the best one for all circumstances, we can identify some attributes of a useful, effective metaphor.

A good metaphor improves our understanding of the environment and leads to constructive, productive, positive action. It reveals more than it hides—or it reveals the critical aspects while obscuring the less important aspects. Further, creative metaphors can help foster innovative solutions that might otherwise be hidden by standard metaphors.

The metaphor need not correlate to physical reality to be useful. Gordon MacKenzie's "organization is hairball" metaphor (from his book *Orbiting The Giant Hairball*) is wonderful and enlightening, even if applied to an organization composed entirely of bald people. We further suggest that multiple, even conflicting metaphors, might be interesting and useful. Mixed metaphors can be funny ("This office is like a well-oiled sports team") or insightful (there are many in David Whyte's book *Crossing the Unknown Sea*)—and both types have value.

Ultimately, the problem is not which metaphors we live by, but rather our blissful ignorance of the fact that they exist in the first place. Once we are aware of them, it is probably wiser to approach them using the *metaphor is tool* metaphor, instead of blindly embracing them and inadvertently accepting the "metaphor is fascist control state" (i.e., the Matrix) instead. For when we see metaphors as tools, we recognize that some are more suited for certain situations than others, just as we would use a hammer and a saw for two different tasks.

**The challenge is to recognize
our mental metaphors,
understanding them for what
they are—subjective, incomplete
descriptions that reveal some
aspects of the world
and obscure others.**

“I’m trying to free your mind, Neo. But I can only show you the door. You’re the one that has to walk through it.”



Our metaphorical mindfunnels need constant reloading—perhaps even frequent revolutions. But changing a metaphor is difficult, and anyone who tries to use a metaphor that differs from the prevailing cultural metaphor is unlikely to get a positive result right away. After acknowledging the difficulty inherent in changing metaphors, Lakoff and Johnson point out that “people in power get to impose their metaphors.” He goes on to explain, “Much of cultural change arises from the introduction of new metaphorical concepts and the loss of old ones.” So, changing metaphors, even on a large scale, is indeed pos-

sible, albeit very difficult. It will of course require the introduction of little red pills. Watch the movie if you don’t know what that means.

The Pill of Awareness

Finally, we are reminded of a scene in *The Matrix* where a newly awakened Neo asks Morpheus, “Why do my eyes hurt?” Morpheus gives the disconcerting reply, “You’ve never used them before.”

Discovering these metaphors made our collective eyes and brains hurt in ways we’d not expected, for the same uncomfortable reason. We were awakened to the fact that the world is not what we thought it was, and we used our eyes for the first time. We realized our previous understanding of reality was largely illusory, and crucial aspects of the real world had been concealed by the mindfunnels we use. In our attempts to discover and uncover existing metaphors, we found ourselves echoing another line from *The Matrix*, where Neo is talking to himself, saying “Okey dokey ... free my mind. Right, no problem, free my mind, free my mind, no problem, right.” Seeing through the Matrix, recognizing our own mindfunnels—these are not easy tasks, but they are essential if we want to see the truth.

We leave our readers with the following questions: Do you want to see the Matrix? Are you The One? Do you have the courage and creativity to investigate, identify, and evaluate the metaphors you and your group are immersed in, thereby seeing what has been concealed? Can you see the metaphors at all? Do you even want to? What can you do to remove, reload, or revolve any metaphors that enslave your team? How do we get that little red pill?

As Morpheus said to Neo when he offered the red pill of awareness, “I’m trying to free your mind, Neo. But I can only show you the door. You’re the one that has to walk through it.”

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Lean Thinking Improves the Hydra-70 Rocket System

Satonya Hobson-Williams ■ Andrew Sheldrick ■ Terry Lingenfelter ■ Mel Adams

A close working relationship between a supplier and DoD can be a major contributor to overall improvements in program performance.



Lean Six Sigma is rapidly making its way into the mainstream of the defense industry. Lean thinking and principles are ultimately used to improve the efficiency and effectiveness of products and services provided to a customer. In short, Lean is the methodology of removing non-value-added steps from your business processes, and Six Sigma is the set of tools used to qualify the defects in your current processes and then quantify the level, amount, or return of those process improvements. Within the U.S. Army's Program Executive Office for Missiles and Space at Redstone Arsenal, Ala., Lean and Six Sigma are quickly becoming valuable tools in the cultural change unfolding within this extremely robust government organization. Specifically, the Joint Attack Munitions System (JAMS) Project Office saw the Hydra-70 System as a perfect candidate project to implement a Lean opportunity on one of the longest-running weapon systems.

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Hydra-70 History

The Hydra-70 Rocket System has been in production with the Army since the 1940s. The munitions system is used for both air-to-ground and ground-to-ground combat. It is capable of being launched from about 20 aviation platforms, from both fixed-wing and rotary-wing aircraft.

General Dynamics Armament and Technical Products is the prime contractor for the Hydra-70 Rocket System. Throughout the system's long and impressive history, it has gone through many component-improvement projects, and more are planned for the future. One specific change is to the system's MK 66 motor tube assembly. The motor tube assembly is manufactured by Gayston Corporation, a subcontractor to General Dynamics.

Since 1982, Gayston Corporation produced more than 4.5 million rocket motor tubes for the Army. Gayston's rocket motor tube production process requires more than 30 manufacturing and inspection steps, and all processes are performed within one facility. The process steps include diverse processes such as part lubrication, metal forming, heat treating, cleaning, machining, chromate conversion coating, and powder coating. Gayston began having trouble maintaining contract delivery schedules during the summer of 2006 as a result of significant equipment

downtime, increasing in-process losses, and production quality issues.

Lean Six Sigma Implementation

To address these critical Hydra-70 Rocket System production issues, Gayston, the JAMS Project Office, and General Dynamics embarked on a joint effort to improve the overall production throughput and quality of the MK 66 motor tube in early April 2007. All team members involved saw this as an opportunity to create a win-win situation for the rocket system and an opportunity to implement Lean and Six Sigma with a DoD supplier. The joint effort was initiated during a May 2007 site visit at the Gayston facility, with several follow-on events planned throughout the following months. Gayston requested a list of key process changes that would dramatically improve product quality, process quality, first-pass yield, total output per week, and on-time delivery.

Initial Assessment

The initial site visit was an opportunity to perform an overall assessment of Gayston's Hydra-70 motor tube production process. This allowed the team to determine whether Lean and/or Six Sigma would be beneficial to motor tube production improvements. The objectives set for the team were to:

- Improve Gayston's ability to meet objectives through Lean implementation
- Identify opportunities for improvement
- Obtain consensus on understanding the process and what is interrupting flow
- Create an improvement plan of action
- Improve reliability and producibility.

The team completed a walk-through of the manufacturing line and performed a quick Lean assessment. From this walk-through and assessment, several Lean approaches were recommended that specify the value of the process from a customer's perspective, identify the value stream through a value stream map for each process, eliminate waste, and continually pursue perfection. The main principle recommended from this assessment was to create a value stream map of the current, ideal, and future state of the motor tube production system. This map is a tool used by manufacturing facilities to understand flow of material and information as a product makes its way through the production process. This would assist Gayston, General Dynamics, and the government in developing an improvement strategy that would use several other Lean principles to support implementation of the improvement strategy. The principles include statistical process control (SPC), 5S, Takt time, and just-in-time (JIT) manufacturing.

SPC is the application of statistical methods to identify and control the variation in a process. The ability to determine the process capability through SPC and real-time process control with built-in quality would be beneficial to

support the improvement strategy. Tactics known as 5S—which stands for the Japanese concept of housekeeping, involving sorting, straightening, sweeping, standardizing, and sustaining—were implemented throughout the plant. Takt time (the rate that a completed product needs to be completed to meet customer demand), JIT manufacturing (a planning system that optimizes the availability of materials at the manufacturing site to only what, when, and how much is necessary), and one-piece or continuous flow (the concept of moving one workpiece at a time between operations) were also found to be greatly beneficial to Gayston's improvement strategy. Although Gayston was in the process of rolling out its 5S program, which is one of the first steps to implementing a Lean workplace, management had not yet realized the impact that it would have on the overall production facility and how it was tied to Lean thinking. The concept of 5S requires one to clean, organize, develop, and sustain a productive work environment. It is one of the main foundations for visual management, which is another Lean principle that makes operation standards visual to workers so that they may follow them easily.

Gayston used visual management to arrange workstations in such a way that the status of that station could be determined at a glance. That gave the operator the ability to complete tasks faster using a standardized approach, paving the way for the team to move forward with the value stream map of the rocket motor process to determine if there were other areas of waste.

Applying Value Stream Mapping

A week-long value stream mapping event, hosted at Gayston, supported by General Dynamics, and led by the JAMS Project Office, was held in August 2007. Value stream mapping is a team-based, data-driven approach to diagnosing opportunities for improvement and developing consensus on an action plan to radically improve overall system effectiveness. It is different from process mapping, which is used in Six Sigma as a visual representation of how a product moves through a process clearly identifying inputs and outputs. The value stream map shows product/service flow, information flow, transportation, data collection, management controls, and where rework may occur.

The value stream mapping event provided training for all parties on how to create a value stream map, who should be included in the event, and what to look for in the process that could be considered waste. The scope, purpose, expectations, and customer value were determined for the event prior to any work starting. Once everyone was clear on what was expected, members from each organization were placed on sub-teams to collect the required data on flows. The value stream mapping exercise dissected the process and evaluated each process component of tube production from the management communication level

From Our Readers

Program/Project Manager: Makes the Differences Clear

The article "Project Manager and Program Manager: What's the Difference?" by Jeffrey Peisach and Timothy S. Kroecker [*Defense AT&L*, July-August 2008] is very well done. The boxes and columns make very clear the roles of each person. I've "been there done that" as the F-16 Armament project manager and the Modular Standoff Weapon program manager.

Alan Habermus
Col (Ret.), USAF

Socrates: Eventually You Have to Solve the Problem

Just wanted you to know how much I appreciated Maj. Dan Ward's piece on Socrates in Washington, D.C., for *Defense AT&L* magazine [July-August 2008]. I am retired, but I consult with lectures on leadership and program management.

I stress the dangers of relying on hard metrics when none of them solve the problems. Eventually *you* have to solve the problem, and vectors help you get there. There is also great power in failure if understood and interpreted properly.

Dan's article inspired me to read more about Socrates and, although Socrates talks about rules and principles, I have not found where he explained the difference. If this distinction is Dan's alone, he deserves even more credit.

Ed Armstrong
Consultant and LMC Program
Management Institute instructor

down to the production associate. This exercise proved to be eye-opening and provided data that were used later during value stream mapping.

Over the course of the week, the team generated hundreds of potential improvement ideas. These ideas were evaluated for ease of implementation, degree of impact and economic viability. A final list was compiled that contained the most practical and beneficial suggestions from the group. Each item on the list was then assigned to a team member. Team members from Gayston, JAM Project Office, and General Dynamics shared responsibility in assuring the items would be completed. Members from each organization then met on a weekly basis, either in person or by telephone, to determine the status of the action list and provide updates to the team.

The primary lesson of the value stream mapping was to identify whether an activity added value to the product or not. Any activity performed on the tube that did not add intrinsic value to the product was a potential for elimination. This exercise provided a completely different view of the total system from that previously held by Gayston, General Dynamics, or the JAMS Project Office. Unnecessary and redundant inspections, excessive and wasteful operator motion, inefficient material movement and handling, work stoppages, delayed prime contractor and JAMS Project Office approvals of changes were all areas that came to light during this evaluation. The current-state diagnosis provided a launching pad for improvement.

Another important lesson for Gayston was the inclusion of all levels of the organization in the mapping exercise. Management, quality and engineering personnel, production supervisors, and production associates were all a part of the evaluation in addition to the JAMS Project Office and General Dynamics participants. It assured a well-balanced, cross-functional approach and generated a sense of teaming that was not present in the program prior to the event. It also allowed the team an opportunity to see the issue from another vantage point. That actually assisted in some of the solutions to eliminate waste in the process.

Based on each sub-team's observations of equipment and the previously collected downtime data, Gayston's approach to equipment maintenance became a prominent subject for discussion during the event as several team members observed areas that could benefit from a more holistic maintenance system. This resulted in total productive maintenance becoming a part of the learning process during this exercise. TPM was the third Kaizen event (outside Lean and Six Sigma) that was held at Gayston to assist with improvements. Kaizen is Japanese for "continuous improvement" and is often used to mean team-based structured problem solving. TPM is a concept that brings maintenance (preventive, productive, and au-

onomous) into focus through a structured approach to minimize downtime and increase uptime or utilization.

Gayston's Current Status with Lean Implementation

While the process of Lean implementation is never fully complete, a majority of the items listed on the original action plan from the value stream mapping event have been implemented. There were a total of eight original process improvements that were considered the top candidates to provide the most benefit to Gayston. The eight process changes were generated by Gayston based on the current processes that could be improved to assist with throughput issues. Of those, four are complete, and the remaining four are in different stages of approval and implementation. The completed four involve:

- A change in the slug length to reduce scrap
- Relocation of a draw operation to reduce material movement
- Reducing the hardness testing from 100 percent to sampling
- Eliminating a powder coat wipe-off station.

These completed events have allowed Gayston to reduce in-process loss, improve material flow, and apply labor to other areas in the process. Reductions and combinations of certain operations and inspection processes have also been instituted, which has resulted in reduced material movement and part handling. A number of improvements relative to material storage, operator motion, ergonomic issues, and product flow were implemented almost immediately. These initial improvements provided feedback to the team that this initiative was valuable and relevant at the floor level. Some of the more complicated process changes have required significant and coordinated technical input from Gayston, the JAMS Project Office, and General Dynamics. These process changes and validations are ongoing and have contributed significantly to overall part quality and production rate consistency.

One major component of the Lean approach that is still being implemented is the institution of process-wide TPM. Maintenance of critical pieces of equipment has already been transitioned to a TPM system, and the uptime and overall equipment effectiveness has improved as a result. TPM is being rolled out across the product line in concert with a company-wide implementation of 5S principles. Full implementation of TPM throughout the process is planned for 2011, at which time increased uptime, quality, and throughput improvements are expected.

Beyond the initial VSM event, the JAMS Project Office also provided technical expertise relative to statistical process control and made resources available that allowed Gayston to incorporate SPC as part of its in-house data collection system. This integration provides operators at key processes the use of statistics to control the process

and is shifting problem detection from a reaction-based approach to a more preventive method. The focus of SPC has been to drive the decision making and process awareness down to the operator level by collecting and analyzing data in real time in a way that allows the floor level personnel to evaluate the quality of their own product.

Overall Streamlining Effect

The quantifiable effect on Gayston's performance as a result of this teaming effort across the supply chain has been significant. Gayston's overall delivery rate has increased by 64 percent over the course of the last 16 months. More important, in-process losses continue to decrease. Over the same time period, Gayston has recognized close to a 50 percent reduction in nonconforming material. While the improvements to date have been noteworthy, Gayston expects to see further reductions in nonconforming material and consequently higher delivery rates as the remaining items on the original action list are implemented.

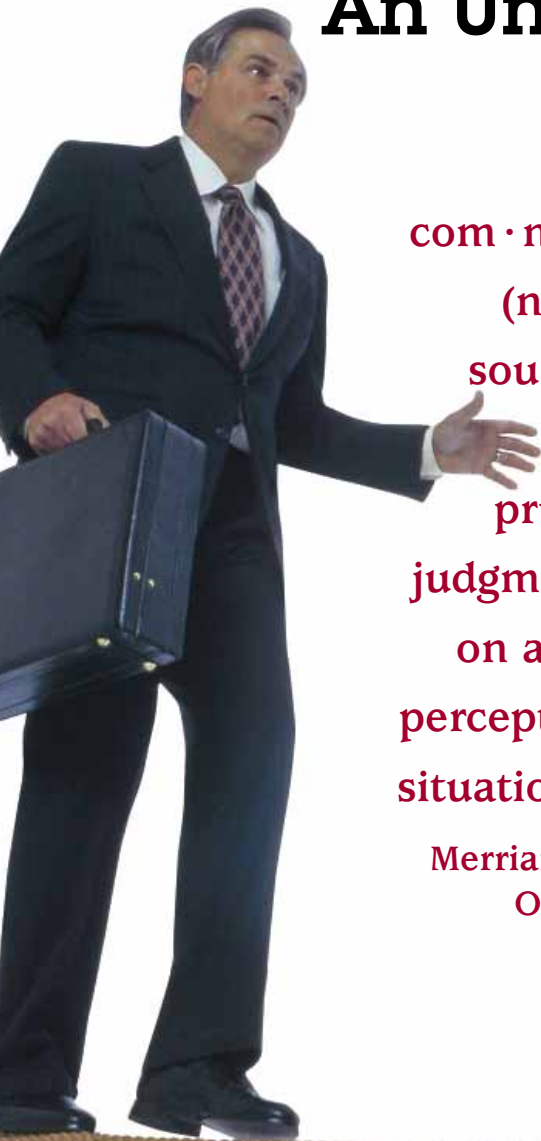
Problem resolution and process improvement efforts have become more streamlined as a result of the close communication and cooperation among the team members of all organizations. This case study demonstrates that a close working relationship between a supplier and DoD can be a major contributor to overall improvements in program performance. It also demonstrates that the uses of Lean thinking and principles throughout the process can assist with improvement in more than just productivity. Attention to detail from the management level to the production associate level can assist in identifying waste in any management and production system. The benefits far outweigh the initial time required to participate and coordinate the event. It will change the mindset of the facility and the people.

The objective for our initial implementation was to improve Gayston's ability to meet requirements through Lean initiatives. We achieved increased delivery rate, decreased process loss, reduced non-conforming material, and improved machine uptime. This was all achieved through the use of Lean thinking and principles (value stream mapping, TPM, JIT, 5S, Kaizen, and visual management). Each of these principles assisted the team in identifying wastes that could be eliminated from manufacturing, management, and government administrative processes to improve productivity, quality, and on-time delivery. Together, we helped change the culture of Gayston Corporation and the way they look at their production and management processes.

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An Uncommon Attribute

Wayne Turk



com · mon sense
(noun):
sound and
prudent
judgment based
on a simple
perception of the
situation or facts.

Merriam-Webster
OnLine

Common sense in a project management role is knowing how much money you have for a project and how much you have spent. It's having good, stable requirements. It's assigning the right people to the tasks. Setting a realistic schedule. Having the right tools for the job. It's planning. It's testing. The list could go on and on. However, common sense frequently goes out the window when well-intentioned but over-stringent, unworkable regulations or inflexible processes are set in place to be blindly followed. It falters under pressure from above and slips when desires replace realism.

Merriam-Webster OnLine at < www.merriam-webster.com > defines common sense as "sound and prudent judgment based on a simple perception of the situation or facts." The most important words in that definition are "sound and prudent judgment." They're words that every project manager should mount on the wall in front of his desk or tattoo on her forehead so that they aren't forgotten. (OK, you don't have to tattoo them on your forehead, but don't forget them.)

Some readers are probably thinking to themselves that common sense is all well and good, but it is frequently wrong. Common sense can be an impediment to abstract or logical thinking. It can be counterintuitive. This is especially true in math and physics. Human intuition can conflict with real-world results. It's like the plant in one of the Harry Potter books that traps Harry and his two friends; the more that they struggle, the tighter it holds them. When they relax, it lets go, like the Chinese finger trap puzzle.

There is an old saying that "common sense is an uncommon attribute." Stephen R. Covey, author of *The 7 Habits of Highly Effective People* puts it a little differently. He says that "common sense is not commonly practiced." When it comes to project management, I hate to admit it, but it is too often true. We sometimes do some really dumb things.

But what is common sense? We all "know" what it is and how it is manifested. On an individual basis, common sense is knowing when to come in out of the rain, why the early bird gets the worm, and that life isn't always fair. It's simple, sound financial policies: Don't spend more than you earn. It is reliable parenting strategies: The adults, not the kids, are in charge (which applies to managing, too).

Albert Einstein said, "Common sense is the collection of prejudices acquired by age eighteen." Probably true, but it is also the acquired wisdom of experience. We've seen what works with management, and what doesn't. So while there are exceptions, I will continue down the path of advocating commonsense solutions. Common sense is more often right than wrong.

Defense AT&L authors Dan Ward, Chris Quaid, and Gabe Mounce, in a series of articles over the past several years, have advocated what they call FIST—fast, inexpensive, simple, and tiny—as a guideline for projects. I couldn't agree more and recommend people reread their articles (particularly "FIST," *Defense AT&L*, March-April 2006 and "FIST, Part 5," *Defense AT&L*, May-June 2006). There was

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an uncommon amount of plain old common sense advocated in those articles, although the actual term may not have been used. The brand of common sense advocated by Ward et al., goes against some commonly accepted ways of running projects in the government. But who said that the government always uses common sense? Just because we've always done something one way, doesn't mean it is the best way.

That is part of the "prudent" mentioned earlier. We have to think about how we do things, how we solve problems, and how to get the best results. Taking the time to think things through before rushing into action can pay large dividends. That is especially true if the process or action seems to go counter to common sense.

A Lack of Common Sense

Let's look at a couple of examples that fail the common sense test. The project is small, the total allotted for the project is only 400 hours, resources are five people, and the timeline is a month to complete the job. It is ludicrous if the project has to meet process requirements to develop a large document or set of documents like a full project management plan, configuration management plan, quality assurance plan, etc.

Another example: An organization puts out a request for proposal. The bids come in, but none is within the expected range. Are the contractors greedy? Was the government estimate wrong? Were the requirements solid and understandable? Was there an unrealistic schedule? Most of the time, it's one of the last three reasons, and it's because there was a rush to get the RFP out the door before determining a good set of realistic requirements and a schedule to match. Common sense says that if we have good, logical, workable requirements, we can get reasonable bids and ultimately, a successful project. Sure, we can all think of projects with good requirements that didn't get good bids or failed in the long run. But those are the exceptions, and exceptions happen. Common sense helps minimize the exceptions.

Common Sense Recommendations

Below are some brief recommendations that are based on a common sense approach to project management. They are not new and they are not rocket science (unless your project happens to involve rockets).

Good Requirements

Gather, prioritize, coordinate, and validate the requirements for the project. Without good requirements, you don't know what you are building or if it will be usable when you finish.

Involve the Users

Having the users involved from the beginning helps get those good requirements. In fact, having them in-

volved throughout makes good sense. Ensure all levels of end users are involved. They have the kind of input that you need to put out the products that are required—input that can save you a lot of wasted effort and money.

Minimize Scope Creep

Minimizing change makes sense on many levels. Scope creep and changing requirements can be slow poison. A simple change here can lead to another there until the project is in deep trouble, and the final product bears only a faint resemblance to what was originally planned. Schedule slips and cost overruns are the results. Try for stable requirements and no changes. Flexibility is needed, though, especially with a long project. Needs change, as does technology. Vendors come and go. Budgets wax and wane. Customers and their level of support may be in flux. All of these happen, and you must accept some change, but keeping requirements changes to a minimum makes the best sense.

Realistic Schedule

Develop a realistic schedule with milestones. There should be both short- and long-term goals. Keep the schedule visible to all so that the team members know what they are working toward and the current status. Keep the milestones measurable, and keep the timeframe short (no more than three to four weeks apart is a good guide). In a very short duration project, the spacing can be even tighter, and that may be critical if you have short-term deliverables and a compressed development cycle. Short times between milestones means faster recovery if there are problems.

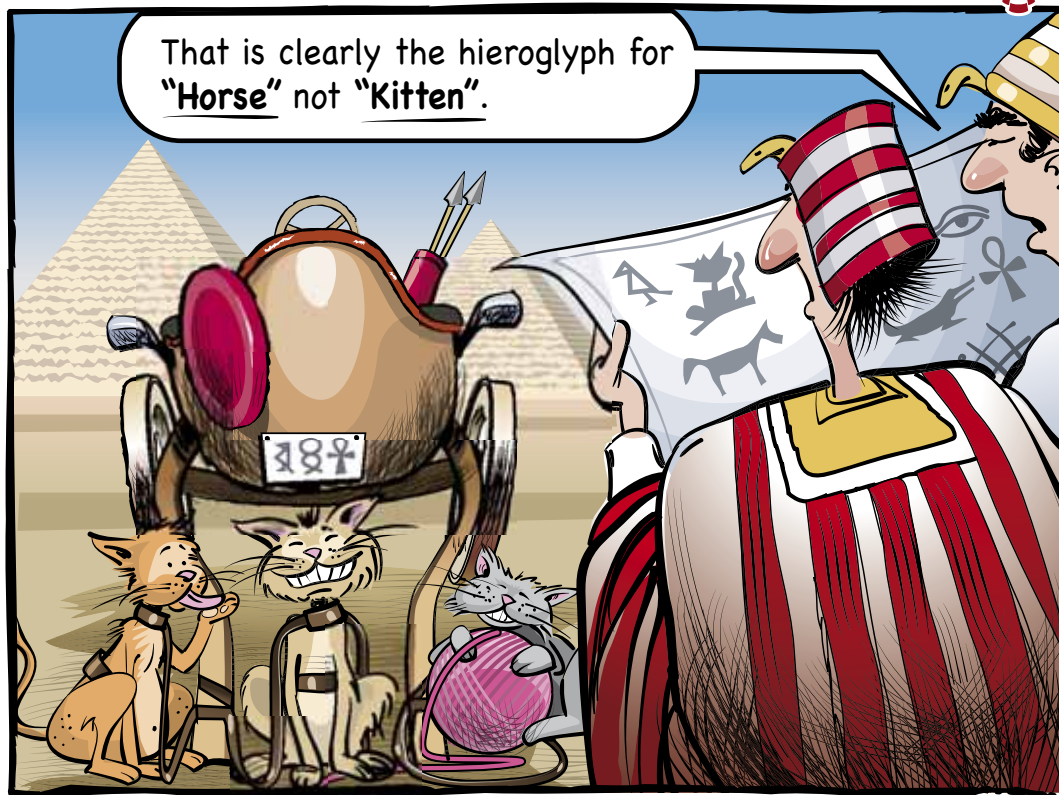
Good Communication

Communication may be the most important part of project management. It makes good common sense to ensure that everyone is aware of what is going on. Communicate up the chain, with your peers, and with your team. Keep your boss informed of the good and the bad on a regular basis. Communicate what is happening to the team and get them to communicate with you. Give them feedback on their work and on the project status and plans. Keep them informed about what changes are occurring and why. And communicate with others outside your organization who need to be kept in the know. Don't let people feel like mushrooms—kept in the dark, fed manure, and expected to grow and prosper.

Good Planning

Another critical bit of common sense is good planning. Plan out what will be done and how. Most projects have required plans as deliverable. It is not an exercise that can be skipped. Prioritize actions and deliverables to keep a team tightly focused. Publicize the plans. That ensures everyone understands how the project will be accomplished.

GREAT MOMENTS IN ACQUISITION HISTORY



1600 BC: Egyptian chariot engineers discover the importance of design reviews.

Problem Resolution

Develop a problem-resolution process. There *will* be problems. They may be technical, equipment-related, differences of opinions, or personnel issues. Having a process to resolve problems can save you headaches. And the “process” of having you, the manager, resolve all of the problems is not the best way to do it.

Quality Assurance

Quality assurance is considered a pain in the neck or a hindrance by some managers. That may be true in some cases, but a good quality assurance program means better products and fewer problems in the long run. The quality assurance process requires the use of common sense, too. It must focus on the important, not the trivial—not always easy to enforce.

Risk Management

A good risk management process to identify and mitigate risks is another commonsense necessity. If you don’t have a good risk management program, you won’t see the problems coming. And if you don’t see them coming, how can you plan to handle them? Identify in advance

the risks that could have a negative impact on the project and diligently work to find strategies to overcome, bypass, resolve, or mitigate those risks.

Comprehensive Testing

Adequate and timely testing with good test plans makes for good products and prevents major problems in the field. If you really want to know if your project is working, grab a user and give him or her a chance to try the product. The people who are going to be using the product are the best to test it.

Standardization

Standardizing terminology, data elements, and processes is something else that will pay off. Standardization gets everyone singing from the same sheet of music, to use a cliché. That is a part of configuration management. Ensuring that the same versions of software, documents, plans, and schedules are used by everyone makes sense.

Repeatable Processes

Employ good, repeatable, but flexible processes. Processes set the structure, framework, and baseline for a project.



Common sense
simply means being efficient,
using the right resources for the job,
and having a product that meets the
needs of the user. In this time of
turmoil and tight budgets,
common sense is more
important than ever.

Knowing that things are done the same way every time gives the team and customer confidence that nothing is missed and that the results are trustworthy, useful, and usable. Good processes keep you out of trouble, but following bad processes or processes that don't fit the project makes no sense.

Delegate

Writing down tasks and delegating them can keep tasks from falling through the cracks. If they are written down, they aren't forgotten. And it makes sense to delegate to the appropriate person or team. A project manager cannot, and should not, try to do it all. Use the team approach whenever possible.

A small-team approach to tasks helps with flexibility. It can also cut down on the minutiae that the PM would normally deal with. Even if it is a large project, the small-team approach works well. However, PMs must empower task leads to manage within their areas of responsibility. Keep communication lines open. Try to meet formally with task leads on a regular basis to review and measure against milestones. It is not a bad idea to talk daily with them on an informal basis. Frequent interaction and open communication can head off possible problems as early as possible.

Metrics

Use the Earned Value Management System and other metrics to tell how the project is progressing. Common sense says that if we know where we are, how much we've spent, how much is left, and what we have accomplished, we stand a better chance of being successful. You can't improve if you don't measure. Develop metrics to find out what is going right, where you can optimize, or where you need to devote extra attention

Budgeting

Firm and consistent budgeting leads to more successful projects. The time and effort wasted on annual budget justification can have a severe impact on a project. That's a sore point with many of us. The current government methodology for funding projects doesn't meet the common sense test in most cases and needs improvement. This article doesn't provide the answer, but there are people working on it. Luckily some projects *are* funded in ways that do make sense, but most aren't.

It All Comes Down to Common Sense

In all my previous articles in *Defense AT&L*, I've tried to take a common sense approach to various aspects of project management. Common sense simply means being efficient, using the right resources for the job, and having a product that meets the needs of the user. In this time of turmoil and tight budgets, common sense is more important than ever.

Thomas Paine, in *Common Sense*, the pamphlet urging the colonies to break away from England, said that "the cause of America is in a great measure the cause of all mankind," and that's still true today. No matter what your beliefs are about Iraq, Afghanistan, or the United States as the world's policeman, we all need to do our part for our warfighters. We need to get them the right products in a cost-efficient and timely manner. That means using the best processes and the right resources, and getting the best results on DoD projects. It means using a little common sense.

The author welcomes comments and questions and can be contacted at rwtturk@aol.com or wayne.turk@sussconsulting.com.

In the News

SPECIAL TO AMERICAN FORCES PRESS SERVICE (JUNE 27, 2008) ARMY ACCELERATES DELIVERY OF FUTURE COMBAT SYSTEMS TECHNOLOGIES

Lindy Kyzer

The Army is accelerating the delivery of key Future Combat Systems technologies to the field, officials announced June 26.

Infantry brigade combat teams will receive the technologies, called “spinouts,” sooner than previously planned, officials said.

The spinouts include tactical and urban unattended ground sensors; the non-line-of-sight launch system; the Class I, Block 0 unmanned air vehicle; the small, unmanned ground vehicle; and network kits for Humvees.

Lt. Gen. Michael A. Vane, director of the Army Capabilities Integration Center, discussed the accelerated fielding of cutting-edge equipment in a teleconference with bloggers and online journalists.

“This decision reflects the need to move more aggressively to support current operations across both our active and reserve component capabilities with the Future Combat Systems capabilities,” he said.

Commanders and soldiers in the field, as well as members of Congress and Defense Department and Army leaders, have been asking for future combat technologies to be used for the current fight in Iraq and Afghanistan, Vane said.

Operational needs statements from infantry brigade commanders in 2007 and 2008 were double the number from heavy brigades, and accelerating the fielding of FCS spinouts addresses many of those capability gaps, Army officials said.

Vane pointed out that FCS is not being developed to provide “perfect” information.

“We recognize that soldiers will always fight for information,” he said. “But the soldier on the battlefield and the commander is the best decision maker, the best sensor, the best shooter, the best communicator, the best negotiator with both allies and potential enemies.

“What we want to do is we want technology to enable that soldier and that commander to better understand the

battlefield,” he continued. “Sometimes people think we’re building something that’s a fantasy or that technology is the answer to everything, and we absolutely are not. What we are doing is trying to leverage that technological advantage that American industry and America’s allies help us bring to the battlefield.”

Kyzer works for the office of the chief of public affairs, media relations division, Department of the Army.

NAVAL STATION ACTIVITY MECHANICSBURG NEWS RELEASE (JULY 1, 2008) NSA MECHANICSBURG LOGISTICIANS TOUR USS CARNEY, CONNECT WITH THEIR CUSTOMERS

Mass Communications Specialist 2nd Class Charley Abrams, USN
PENN’S LANDING, Pa.—Seeing the positive end result of one’s efforts and labor always serves as a focal and motivational point, as proved true for a group of 15 civilian and uniformed employees from the Naval Inventory Control Point (NAVICP), Mechanicsburg, Pa., during their visit aboard *USS Carney* (DDG 64) on July 1.

The destroyer, moored here in conjunction with Philadelphia’s Independence Day observances, welcomed aboard the employees for a tour designed to show the operational end point for many of their efforts conducted within the Navy’s supply chain.

The ship’s public affairs officer Lt. j.g. Parker Carlisle brought the group aboard and conducted a tour featuring areas such as the bridge, mess decks, combat, and most important for this group, supply.

Australian Navy Lt. Cdr. John Potter, currently working for the NAVICP as part of an international officer exchange program, said the tour was a “good opportunity to see how supply works from the ship’s end.”

As the tour reached the highlight of seeing the ship’s supply department, participants got a firsthand look at who and what they were supporting from their offices at the Central Pa., Navy depot. Storekeeper 1st Class Joseph Melton was there to greet them. He explained to the group the challenges of maintaining the shipboard budget and keeping *Carney*’s combat systems up and running.

Tour participant Diana Garcia, who works as a logistics management specialist, defined her job at NSA Mechanicsburg as “taking care of provisions and procedures.” This means a ship sends her an order; she finds the source, buys the item, and fills the order. Each member of the



On July 1, 2008, a group of 15 logisticsicians from the Naval Inventory Control Point visited the Navy destroyer *USS Carney* (DDG 64) during its port visit in Philadelphia, to witness firsthand how their work in Mechanicsburg, Pa., impacts the Navy's fleet and its warfighters. Navy Storekeeper 1st Class Joseph Melton explained to the group the challenges of maintaining the shipboard budget and keeping *USS Carney's* combat systems up and running. Photo courtesy NSA Mechanicsburg

group had a specialty, and Garcia's includes refrigerating valves and air-conditioning units, in which the *USS Carney* had "one of the best he's experienced" according to Lt. Douglas Turner, *Carney's* supply officer.

Inventory manager Delmar Madden explained the process whereby a ship contacts him for supplies, which he then orders, re-directs, or has the part repaired. If the part is unavailable and the urgency is great, the part is sought out worldwide from operational ships.

An example of Madden's work that has affected the *USS Carney* is when all the DDG class fuel nozzles were replaced. The optimized computer system today allows one person to do the work of what used to take many, which, as Madden states, makes it "one of the biggest jobs you can imagine."

The NAVICP logistician enjoys this aspect of the job because he is always learning new things, making the tour a worthwhile experience.

By the end of the tour, communication and learning experiences were gained, allowing for both ship's company

and base employees to better understand and appreciate each other.

Abrams writes for U.S. Naval Support Activity Philadelphia.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 15, 2008)

NAVY NAMES TWO VIRGINIA CLASS SUBMARINES

The Navy announced today that the next two Virginia-class attack submarines will be named the *USS Minnesota* and the *USS North Dakota*.

The selection of *Minnesota*, designated SSN 783, honors the state's citizens and their continued support to our nation's military. Minnesota has a long tradition of honoring its veterans of wars past and present. The state is proud to be home to 46 Medal of Honor recipients that span from the Civil War to the Vietnam War.

This will be the third ship to bear the state name. The first *USS Minnesota*, a sailing steam frigate, was commissioned in 1857 and served during the Civil War, remaining in service until her decommissioning in 1898. The second *Minnesota* was commissioned in 1907. On December 16, 1907, she departed Hampton Roads as one of the 16 battleships of the Great White Fleet sent by President Theodore Roosevelt on a voyage around the world. She continued her service through World War I, and was decommissioned in 1921.

The selection of the *North Dakota*, designated SSN 784, honors the state's citizens and veterans and their strong military support and heritage from the Frontier Wars through the Cold War and currently the Global War on Terrorism. Seventeen North Dakotans have received the Medal of Honor for actions in combat, including Master Sgt. Woodrow W. Keeble who posthumously received the Medal of Honor during a White House ceremony on March 3, 2008. This is the second ship to bear the name North Dakota. The first ship, the Delaware-class battleship *USS North Dakota*, was in service from 1910 through 1923.

These next-generation attack submarines will provide the Navy with the capabilities required to maintain the

nation's undersea supremacy well into the 21st century. They will have improved stealth, sophisticated surveillance capabilities, and special warfare enhancements that will enable them to meet the Navy's multi-mission requirements.

North Dakota and Minnesota will have the capability to attack targets ashore with highly accurate Tomahawk cruise missiles and conduct covert long-term surveillance of land areas, littoral waters, or other sea-based forces. Other missions include anti-submarine and anti-ship warfare; special forces delivery and support; and mine delivery and minefield mapping.

The Virginia-class is 7,800 tons and 377 feet in length, has a beam of 34 feet, and can operate at more than 25 knots submerged. It is designed with a reactor plant that will not require refueling during the planned life of the ship, reducing life cycle costs while increasing underway time.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 16, 2008) **DEPARTMENT OF DEFENSE PARTNERS WITH UNIVERSITIES FOR SOCIAL SCIENCE RESEARCH**

The DoD has launched a university-based social science initiative to support basic research in topic areas of importance to current and future U.S. national security.

The initiative, called Minerva, will support multi- and interdisciplinary and cross-institutional efforts addressing a range of social science topic areas. It will bring together universities, research institutions, and individual scholars into a partnership to tackle topics of interest to DoD. For example, DoD could pursue topics such as foreign military and technology research, terrorism, or cultural studies. The initial funding is \$10-20 million annually.

The objectives are:

- To foster and improve the Defense Department's social science intellectual capital and ability to understand and address security challenges
- To support and develop basic research and expertise within the social sciences community in subject areas that may provide insight to current and future challenges
- To improve the Defense Department's relationship with the social science community.

To achieve the secretary of defense's vision, DoD will pilot a number of approaches for engaging the social science

community. This multi-pronged strategy will enable the department to solicit a broad range of proposals from the social science community and to leverage the expertise and infrastructures of a wide range of existing mechanisms for funding basic research.

The Minerva initiative will have several components to solicit and manage proposals. The first of these has been released through a DoD broad agency announcement. Additionally, DoD signed a memorandum of understanding with the National Science Foundation on July 2, 2008, to work together on a range of projects related to DoD's Minerva initiative, which might include a solicitation of proposals. Submission to DoD's open broad agency announcement will not preclude any offeror from submitting proposals to future solicitations.

Remarks by Secretary of Defense Gates on the Minerva initiative may be found at <www.defenselink.mil/speeches/speech.aspx?speechid=1228>. The currently open DoD BAA may be found at: <www.arl.army.mil/www/default.cfm?Action=6&Page=8>.

AIR FORCE PRINT NEWS (JULY 17, 2008) **AETC FIRST TO RECEIVE NEW ACQUISITION AUTHORITY**

Capt. John Severns, USAF

RANDOLPH AIR FORCE BASE, Texas—Air Education and Training Command became the first major command authorized to pursue services acquisitions valued at up to \$500 million following the signing of an agreement between the command and Air Force acquisition officials.

The new agreement is expected to help streamline the acquisition process and speed the rate at which services are provided to warfighters.

Under the agreement, AETC received "Silver Delegation Authority" from the Air Force Program Executive Office for Combat and Mission Support, commonly called PEO Services.

Silver Delegation Authority gives Garry B. Richey, director of logistics, installations and mission support for AETC, the ability to manage and oversee acquisition contracts valued up to \$500 million while providing coordinating information to PEO Services.

"This delegation is recognition of the outstanding contracting and program management professionals we have on our headquarters staff, as well as throughout the command," Richey said. "But it also commits us to maintain

robust management and oversight of all our command services acquisition activities—from requirements definition to source selection and through contract performance.”

The contracts in question cover a wide variety of services and support, many of which have a direct impact on the warfighter, according to Colleen Phipps, a contracting official in the AETC Acquisition Support branch.

The agreement covers contractor support for major programs such as aircraft maintenance, base operations support, and trainer maintenance, as well as smaller contracts such as food service and grounds maintenance that impact the daily lives of AETC airmen.

Officials signed the agreement during a conference on services acquisition hosted by PEO Services in Oklahoma City in June. The conference allowed acquisition and contracting officers from across the Air Force and other government agencies to discuss the future of services acquisition.

Severns writes for Air Education and Training Command Public Affairs.

AMERICAN FORCES PRESS SERVICE (JULY 23, 2008) **DEFENSE LEADERS PROMISE IMPROVED CONTRACTING OVERSIGHT**

Donna Miles

WASHINGTON—The U.S. military depends heavily on the support contractors provide in Iraq and Afghanistan and is stepping up efforts to ensure dollars dedicated to their activities are spent appropriately, Deputy Defense Secretary Gordon England told Congress.

England joined Gen. Benjamin S. Griffin, commander of U.S. Army Materiel Command; acting Defense Department Inspector General Gordon S. Heddell; and Shay Assad, DoD’s director for defense procurement, acquisition policy, and strategic sourcing, during a Senate Appropriations Committee hearing on contractor accountability.

The Defense Department takes its contract accountability and oversight responsibilities “very seriously,” England told the lawmakers. He noted that multiple department agencies have conducted “literally thousands of aggressive reviews, audits, and oversight.”

In doing so, “they have indeed uncovered incidences of fraud and abuse,” he said.

The Defense Department takes meaningful corrective actions and makes structural organizational changes where appropriate, England said. Meanwhile, it holds people accountable for their actions.

Heddell, who became acting DoD inspector general [in mid-July], noted that the department is completing or conducting audit oversight efforts that cover about \$158.9 billion related to Defense Department efforts in Iraq alone.

As of June 30, the Defense Criminal Investigative Service had 124 ongoing investigations related to Southwest Asia that involve 286 subjects, he told the committee. Thirty-two of these investigations have been adjudicated, resulting in 22 federal criminal indictments and 32 felony convictions, he reported. It also resulted in 32 federal “criminal informations”—essentially, cases where defendants agreed that evidence against them was so strong that they agreed to forego trial proceedings and accept sentencing, Heddell said.

The adjudications have resulted in 54 years of confinement, 44 years of probation, debarment of 10 people and four companies, and suspension of 28 people, Heddell said.

In addition, the U.S. government accepted three settlement agreements, received \$13.5 million in restitution, levied more than \$374,000 in fines and penalties, received \$1.76 million in forfeitures, and seized another \$2.65 million in assets, he reported.

With \$71 billion obligated to 98,000 contracting activities since January 2003, the department has struggled to provide full oversight for this huge volume of contracts, England conceded. Complicating the process, he said, is the fact that 98,000 expeditionary contract actions have occurred since 2003, with much of the work performed in a dangerous and difficult environment.

The department “will continue to improve the effectiveness and efficiency of our contracting across the entire enterprise,” but recognizes that it will take time, England said. He noted that the defense contracting force was cut dramatically during the 1990s, and that bringing replacements up to speed won’t happen overnight. “It will likely take a few more years before all of these critical skills are fully replenished,” he said.

Meanwhile, England pointed to the July 22 swearing-in of retired Marine Corps Maj. Gen. Arnie Fields as special inspector general for Afghanistan reconstruction as a positive step forward.

"I'm confident Arnie Fields will help to do in Afghanistan for the departments of Defense and State what [special inspector general for Iraq reconstruction] Stu Bowen has been able to accomplish over the past several years in Iraq as part of his special investigative status," England said.

Griffin told the senators the military knows it has improvements to make in its contracting systems and oversight.

"I will state up front that we are not where we want to be today in terms of contracting," he said. "But we have made significant progress. We are committed to improve our ability and capability to provide not only first-class expeditionary contracting but also to implement improvements across the entire contracting system."

While vowing to improve oversight of contractor activities, England told the lawmakers the military depends on contractors who work as partners with servicemembers in harm's way.

"I ... want to thank the people who deployed and who are deployed today who do this contracting work for America," he said. "While the department has problems with some of its processes, we are extraordinarily grateful to the brave men and women who deploy to Iraq to accomplish this very difficult mission."

Miles writes for American Forces Press Service.

AMERICAN FORCES PRESS SERVICE (AUG. 6, 2008) **PENTAGON ISSUES DRAFT REQUEST FOR PROPOSALS FOR NEW TANKER CONTRACT**

Jim Garamone

WASHINGTON—The Defense Department has issued a draft request for proposals to the competitors in the Air Force's \$35 billion program to acquire new aerial refueling tanker aircraft.

The request went to Northrop-Grumman and Boeing, and addresses concerns the Government Accountability Office raised about the original award of the contract in February, said Shay Assad, the Defense Department's director of defense procurement, acquisition policy, and strategic

sourcing. Assad spoke during a Pentagon news conference Aug. 6.

The GAO, the investigative arm of Congress, recommended that the Air Force re-bid the contract—originally won by a Northrop-Grumman/EADS/Airbus consortium in February. Boeing protested the decision, and in June the GAO agreed that there were irregularities in the contracting process. Defense Secretary Robert M. Gates said DoD would address each of the GAO's findings

"We are doing that, and we are addressing them in a very measured and serious way to ensure that we, in fact, can execute this procurement in a manner that's fair to both parties and is in the best interests of the warfighters and the taxpayers," Assad said.

DoD officials will take a week to discuss elements of the draft with Northrop-Grumman and Boeing. "Each offeror will be provided an equal amount of time to sit down and discuss face-to-face what their views are of the draft RFP [request for proposal]," Assad said.

By the middle of August, Assad said, he expects DoD will issue the final request for proposals amendment. Both companies will have 45 days to submit their revisions to their proposals.

This takes the process out to Oct. 1, Assad said. Through late November, DoD officials will have discussions—both oral and written—with the companies about their proposals.

"We would then hope to close discussions around the end of November [or] early December, request a best and final offer—or what we now term final proposal revisions—in the first week in December, and complete our evaluations and award right around New Year's Eve," Assad said.

Assad said the process is on track now, and the department needs to finish this contract so warfighters can get "what they need at a price that the taxpayers can be pleased with."

The Northrop-Grumman contract awarded in February is under a stop-work order. If the department chooses Boeing as part of this process, then DoD will cancel the contract with Northrop-Grumman. If the new process still chooses Northrop-Grumman, then the stop-work order can be lifted and work can proceed, officials said.

Garamone writes for American Forces Press Service.

DEPARTMENT OF DEFENSE NEWS RELEASE (AUG. 12, 2008) **INDEPENDENT PANEL TO REVIEW DEFENSE CONTRACT AUDIT AGENCY PROCEDURES**

The Department of Defense announced today that an independent advisory panel, the Defense Business Board, will review the overall performance of the Defense Contract Audit Agency.

The review follows a Government Accountability Office report released July 23 that concluded DCAA auditors were improperly hindered in some of their investigations of defense contractors.

The Defense Business Board, an independent federal advisory committee composed of senior business executives, has agreed to form an independent review panel supported by subject matter experts to review DCAA procedures and make recommendations for improvement as appropriate.

The panel expects to have its recommendations within 60 days from the start of the review, and they will be shared with the department's senior leadership as well as the defense congressional oversight committees.

ARMY NEWS SERVICE (AUG. 15, 2008) **RESET PROGRAM MAINTAINS TROOP READINESS**

Elizabeth M. Lorge

WASHINGTON—The Army reset program is essential to the readiness and combat capability of the Army, said the outgoing director of integration at the office of the deputy chief of staff for Army programs (G-8).

According to retiring Brig. Gen. Albert Bryant Jr., the Army reset program began about three years ago and is responsible for

recapitalizing or replacing more than 300,000 pieces of equipment.

"The program is an essential part of sustaining the Army's ability to conduct operations. If we don't reset these units and get the equipment into the hands of the soldiers, allow them to train with it and deploy, then obviously our ability to do our job in our deployed theaters of operation will suffer," he said.

Reset is one of Chief of Staff of the Army Gen. George W. Casey Jr.'s four imperatives, and it costs an average of \$16 billion dollars to reset 20-something brigades each year. Congress passed the latest supplemental spending bill on June 30, and included almost \$8 billion for reset in operations and maintenance funding and almost \$2 billion for reset in procurement funding.

In a typical reset process, a unit would take a piece of equipment, a Humvee, for example, and turn it over to the Army Sustainment Command in Kuwait. The vehicle would be shipped to a depot in the United States, where it would be inspected, stripped to the base frame, and inspected again. After sandblasting the vehicle, it would



Field service representatives deployed from Tobyhanna Army Depot, Pa., prep a Humvee before installing a Warlock electronic countermeasure system.

Photo by Steve Grzedzinski

be put through an assembly line and rebuilt to the highest, newest standards available. An older, up-armored M1114 Humvee would come out as a heavier, safer M1151/1152 Humvee, for example.

The goal, Bryant said, is to return each piece of equipment to zero-miles, zero-hours status.

“That’s an almost-like-new vehicle,” he said. “Zero-hours and zero-miles means that it’s like getting a completely factory-rebuilt vehicle with the same warranties you had when you started.

“The wear on our vehicles [is intense]. We’re using them at many, many times the normal peacetime utilization rates. The terrain is tough on the vehicles. The weather is extreme. The combination of heat and dust is extremely wearing on any mechanical system. So the process of looking at them in detail and ensuring we are restoring them to [full-operational] capacity at whatever our requirement is, is fundamental to our reset program,” Bryant continued, noting that equipment reset will continue for at least two to three years after operations in Iraq and Afghanistan end.

If a vehicle is so damaged that it would be impossible or cost-prohibitive to repair, the Army would replace it, said Bryant.

“We always balance out the requirement between what is the cost of repairing the vehicle versus what is the cost of replacing the vehicle,” he said. “That’s obviously a function of both resources that we have available to place against the problem, and what is the best mix. If a vehicle is not cost-effective to repair, we will request replacement of it.”

The reset equipment won’t be returned to the same unit but will go into a large Army “motor pool” and be assigned to commanders and units as needed. The process usually takes eight to 10 months, but can be expedited depending on requirements.

Bryant said the Army tries to get modernized or recapitalized equipment to soldiers within six months of a unit’s return so they’ll have plenty of time to train before beginning another deployment, but added that both meeting this requirement and getting the equipment to theater where it’s needed most is a big challenge.

In order to get equipment back into the hands of warfighters, depots like Anniston Army Depot, Ala., Red River

Army Depot, Texas, and Tobyhanna Army Depot, Pa., are busier than they’ve been since Vietnam. According to Bryant, most are meeting or surpassing production requirements.

Some depot employees even deploy to the Middle East to repair equipment in theater, and the Army Sustainment Command recently began sending teams to individual units to repair smaller equipment like weapons, radios, and chemical and biological detection and sensing equipment. According to Bryant, in two or three weeks one team might repair 40,000 pieces of equipment for a brigade combat team.

“Commanders love it. They said it’s exactly the right way to do it, and we’re trying to see if we can expand it throughout the total force as much as possible. That’s over and above equipment which is so seriously damaged that it has to be evacuated to a depot facility for repair,” said Bryant.

“The reset program has been a tremendous success,” he said. “The proof is in the fact that when our units deploy, commanders have what they need to do their jobs.”

DEPARTMENT OF DEFENSE NEWS RELEASE (AUG. 18, 2008) **DEPARTMENT OF DEFENSE RELEASES SELECTED ACQUISITION REPORTS**

The Department of Defense has released details on major defense acquisition program cost, schedule, and performance changes since the December 2007 reporting period. This information is based on the Selected Acquisition Reports (SARs) submitted to the Congress for the June 2008 reporting period.

SARs summarize the latest estimates of cost, schedule, and performance status. These reports are prepared annually in conjunction with the president’s budget. Subsequent quarterly exception reports are required only for those programs experiencing unit cost increases of at least 15 percent or schedule delays of at least six months. Quarterly SARs are also submitted for initial reports, final reports, and for programs that are rebaselined at major milestone decisions.

The total program cost estimates provided in the SARs include research and development, procurement, military construction, and acquisition-related operation and maintenance (except for pre-Milestone B programs, which are limited to development costs pursuant to 10 U.S.C §2432). Total program costs reflect actual costs to date as well as

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future anticipated costs. All estimates include anticipated inflation allowances.

The current estimate of program acquisition costs for programs covered by SARs for the prior reporting period (December 2007) was \$1,642,973.5 million. After subtracting the costs for seven final reports—Advanced Deployable System (ADS), Defense Integrated Military Human Resources System (DIMHRS), Javelin, Mission Planning System (MPS), Ship Self Defense System (SSDS), Ohio Class SSGN Conversion, and T-45TS—and adding the costs for three new programs—Large Altitude Infrared Countermeasures (LAIRCM), Mine Resistant Ambush Protected (MRAP), and SBSS B10 (Space Based Space Surveillance Block 10)—from the December 2007 reporting period, the adjusted current estimate of program acquisition costs was \$1,647,118.6 million. For the June 2008 reporting period, there was a net-cost decrease of \$4,550.0 million (-0.3 percent), due primarily to a reduction of C-5 RERP (Reliability Enhancement and Reengining Program) aircraft from the recent Nunn-McCurdy certification.

For the June 2008 reporting period, there were quarterly exception SARs submitted for nine programs. The reasons for the submissions are provided below.

Army

JCA (Joint Cargo Aircraft)—This is the initial SAR for the JCA program. The USD(AT&L) approved the Milestone C decision in an Acquisition Program Baseline dated April 17, 2008.

Navy

EA-6B ICAP (Improved Capability) III—This is the initial SAR for the EA-6B ICAP III program.

ERM (Extended Range Munition)—Program costs decreased from \$1,521.4 million to \$408.2 million (-73.2 percent) due to termination of the program. Four out of five fully configured tactically guided flight failures during a series of engineering developmental tests contributed to the decision to terminate.

H-1 Upgrades (4BW/4BN)—This SAR was submitted to report schedule delays of six months or more since the prior report. Specifically, the operational evaluation Phase I Complete (AH-1Z) slipped two years from May 2008 to May 2010 due to unresolved critical operational issues related to the AH-1Z weapons employment. There were no cost changes reported.

Current Estimate (\$ in millions)	
December 2007 (93 programs)	\$ 1,642,973.5
Less final reports on seven programs (ADS, DIMHRS, Javelin, MPS, SSDS, SSGN Conversion, and T-45TS)	-19,459.8
Plus initial reports on three programs (LAIRCM, MRAP, and SBSS B10)	+ 23,604.9
December 2007 Adjusted (93 programs)	\$ 1,642,973.5
Changes Since Last Report	
Economic	\$ 0.0
Quantity	-4,376.8
Schedule	-198.4
Engineering	0.0
Estimating	+ 427.5
Other	0.0
Support	-402.3
Net Cost Change	\$ -4,550.0
June 2008 (89 programs)	\$1,642,568.6

IDECM (Integrated Defensive Electronic Countermeasures)—This is the initial SAR for the IDECM program. Recent analysis determined that continued research and development funding over the course of the IDECM Blocks 1-3 development has resulted in cumulative R&D funding that exceeds the dollar criteria for a Major Defense Acquisition Program, i.e., Acquisition Category I (ACAT I). The Navy's request to redesignate IDECM as an ACAT I program was approved in March 2008.

MH-60S—This SAR is being submitted to report schedule delays of six months or more. Specifically, Airborne Mine Countermeasures Initial Operational Capability slipped 20 months from July 2008 to March 2010 and AMCM Interim Process Review IV slipped two years from September 2008 to September 2010 as a result of testing and reliability issues. There were no cost changes reported.

Air Force

C-5 RERP (Reliability Enhancement and Reengining Program)—The SAR was submitted to rebaseline from a development to a production estimate following approval of low-rate initial production (Milestone C) and to reflect the Nunn-McCurdy-certified restructured program. Since the last report, costs decreased \$3,436.8 million (-30.9 percent) from \$11,130.9 million to \$7,694.1 million as a result primarily of a reduction in quantity of 59 aircraft from 108 to 49 (-\$3.271.0 million) and associated schedule and estimating allocations (-\$163.9 million).* In addition, there were reductions in support associated with the quantity decrease (-\$401.0 million).

GPS (Global Positioning System) IIIA—This is the initial SAR for the GPS IIIA program after approval of key decision point B on May 8, 2008.

Minuteman III GRP (Guidance Replacement Program)—This is the final submission for this program in accordance with section 2432, Title 10, U.S.C. because it is 90 percent delivered. There were no cost changes reported.

New SARs (As of June 2008)

The Department of Defense has submitted four initial SARs for the following programs for the June 2008 reporting period. These reports do not represent cost growth. The baselines established on these programs will be the point from which future changes will be measured.

Program	Current Estimate (\$ in Millions)
EA-6B ICAP Increment III	\$ 1,053.8
GPS (Global Positioning System) IIIA	4,002.3
IDECM (Integrated Defensive Electronic Countermeasures)	746.0
JCA (Joint Cargo Aircraft)	4,087.8
Total	\$9,889.9

*Note: Quantity changes are estimated based on the original SAR baseline cost-quantity relationship. Cost changes since the original baseline are separately categorized as schedule, engineering, or estimating allocations. The total

impact of a quantity change is the identified quantity change plus all associated allocations.

ARMY NEWS SERVICE (AUG. 19, 2008) "DRAGONS" TEST PROTOTYPE WEAPONS FOR FUTURE RELEASE

Pvt. Kelly Welch, USA

FORT HOOD, Texas—Soldiers of the 1st "Dragons" Battalion, 82nd Field Artillery Regiment, along with Command Sgt. Maj. Dennis Carey, command sergeant major for U.S. Armed Forces Command, got a firsthand look at new weapons systems with a live fire July 29.

Weapon engineers from Program Executive Office Soldier spent time talking with Dragon troopers and received feedback about the design of the weapons. The engineers started the morning with a brief review of the weapons followed by a question-and-answer session.

Some of the new systems were the XM 320 40 MM grenade launcher, the lightweight .50 caliber machine-gun, and M26 12 gauge modular accessory shotgun system.

The new XM 320 grenade launcher comes with improved features designed with lightweight material composition for improved durability and new sighting system designed to lessen interference with rifle and carbine sights. The new grenade launcher also eliminates the need to re-zero after reattaching to a weapon.

The XM 320 grenade launcher will start fielding in February 2009. Some of the weapon's multi-systems are still in the design stage and will require several years before they are used Army-wide.

One of the systems in the experimental stage is the lightweight .50 caliber machine-gun. This weapon system is a variant of the enhanced .50 caliber machine-gun. The new design system can fire all of the current .50 caliber ammunition in the inventory. It has a significant reduction in weight and recoil force. The new design reduces the recoil by at least 60 percent and also allows for a vehicle to become more lethal but still maintain the light weight.

Lt. Col. Mike Ascura, product manager for Program Executive Office Soldier, says the new .50 caliber is still in development.

"The .50 caliber we are seeing today will not be seen Army-wide until 2012," said Ascura. "We are building it for Special Forces now and in the near future for infantry schools."



Alan Kong, lead for test and evaluation on the 40M26 Modular Assault Shotgun System, demonstrates the firing technique to the soldiers of 1st Battalion, 82nd Field Artillery Regiment July 29. Kong, employed with Program Executive Office Soldier, will take feedback from the soldiers to the testing area and incorporate the new ideas into the weapons system.

Photo by Pvt. Kelly Welch, USA

Handpicked field artillery units will continue to test the products before the weapons are released to the infantry schools.

Spc. Jared Smith, San Diego, Calif., native and gunner for Headquarters and Headquarters Battery, 1st Battalion, 82nd Field Artillery Regiment, shot the weapons and gave his opinion on the new designs and seeing the weapons go Army-wide.

"I like the improvements, especially the range spotter," said Smith. "This is definitely something we need."

Carey looked over the new systems and got a feel for the weapons and their systems when he took his turn on the firing line with the new lightweight .50 caliber.

This is by far the best of what has come out of this extended war, said Carey. "These weapons are going to measure our successes in seconds, and those seconds will add up to victory in the continuing war on terror."

Welch writes for 1st Brigade Combat Team, 1st Cavalry Division Public Affairs.

ARMY NEWS SERVICE (AUG. 21, 2008) ARMY RESEARCH ON INVISIBILITY NOT SCIENCE FICTION

Lindy Kyzer

WASHINGTON—Invisibility has long existed in the realm of imagination and fantasy, but for Army scientists and researchers studying ways to apply the latest technology to save soldiers' lives, fantasy is slowly becoming a reality.

Dr. Richard Hammond, a theoretical physicist who works in optical physics and imaging science at the U.S. Army's Research Office, participated in a blogger's roundtable to discuss the developments in the field of negative index materials research and meta materials. Developing research in these areas is making light reflect in ways it never has before—with extraordinary effect.

"Meta materials are artificial materials with versatile properties that can be tailored to fit almost any practical need," said Hammond. These versatile properties enable it to go beyond the capabilities of natural materials, including control of the light at an unprecedented level.

"Similar to general relativity, where time and space are curved, transformation optics shows that the space for light can also be bent in an almost arbitrary way," said Hammond.

Army researchers have paired with Purdue University, the University of Colorado, the University of California Berkley, and Princeton University in a multi-university research initiative. Providing new capabilities to soldiers in the battlefield is the motivation behind the research, said Hammond, and benefits from meta materials have an impact in both the short and long term.

"If you're out on the battlefield and you see a cloud coming, or you suspect there might be an aerosol chemical or biological warfare [agent] being used against you, it's very difficult to quickly detect what the material is," said Hammond.

With the new meta materials being developed, however, the ability exists to see things smaller than the wavelength of light—something that has never been done before, according to Hammond. Utilizing meta materials in the creation of a new lens may allow soldiers to see pathogens and viruses that are currently impossible to detect with any visual device.

“So this would be an enormous improvement, and not just on the battlefield, but it would allow us to make all kinds of materials, what we call nanomanufacturing,” said Hammond, “which could go into electronic and optical devices that you’d use—from night vision goggles to distance sensors to other kinds of sensors.”

In the longer term, the possibility for cloaking materials exists, which would provide “invisibility” by redirecting light around a cylindrical shape.

“One of the most exciting applications is an electromagnetic cloak that can bend light around itself, similar to the flow of water around a stone,” said Hammond. “Making invisible both the cloak and an object hidden inside.”

The research surrounding meta materials and creating tiny particles with unprecedented properties has met the “proof of principle” according to Hammond. What researchers and scientists will eventually accomplish has yet to be seen, however, as that principle is developed and finds new applications, he said.

“This experiment was performed in 2006 and it was almost like a chain reaction,” said Hammond. “The field of transformation optics and meta materials and negative index materials exploded with this. But, as I say, the proof of principle has a long way to go before we can see that on the battlefield.”

Kyzer works for the office of the chief of public affairs, media relations division, Department of the Army.

AMERICAN FORCES PRESS SERVICE (AUG. 28, 2008) **MARINES LOOK FOR BREAKTHROUGHS WHILE DEVELOPING NEW VEHICLES**

Donna Miles

WASHINGTON—The Marine Corps, like the Army, is “still waiting for that technological breakthrough” needed to build a combat vehicle that’s light and agile but also protects crewmembers inside, the Marine Corps commandant said yesterday.

“So we continue to wait,” while exploring best options available now, Marine Gen. James T. Conway told reporters during a Pentagon news briefing.

Both the Army and Marine Corps have sent mine-resistant, ambush-protected vehicles, with their V-shaped hull that deflects underbelly blasts away from the crew compartment, into Iraq and Afghanistan. The 10,000th

MRAP rolled off the assembly line in early July, marking a milestone for the joint MRAP program that began as a Marine Corps initiative.

But the Marines have opted to buy fewer MRAPs than initially planned, and have dedicated them largely to specialized missions such as explosive ordnance disposal and engineering missions.

“In the past, our engineers have ridden to war in the back of a dump truck,” Conway said. “We owe them something better than that.” The small versions of the MRAPs, known as the Category 1 variants, are a good vehicle for that, the general added.

Ultimately, the Marines likely will need hundreds, not thousands, of MRAPs, he said.

Conway said the MRAP’s bulk—which he called too heavy for its suspension and axle systems—and its top-heavy design make it less-than-optimal for many Marine Corps missions. Those problems are exacerbated in Afghanistan, where sloped roads, mountain trails, and switchbacks make driving the vehicles particularly challenging. Although more MRAPs have been deployed to Iraq than Afghanistan, Conway said, the Marines have experienced more rollovers in Afghanistan.

Meanwhile, the Marine Corps is looking beyond current operations toward developing its next-generation fighting vehicles. The challenge, Conway said, is “Where do we want the Marine Corps to be in 2020 with its vehicle complement based on what we think the threat will be at that point?”

The expeditionary fighting vehicle, or EFV, “seems to be making some good progress,” Conway said, but he conceded it’s still a long way from production. The 17-passenger armored vehicle—able to run on the ground as well as in the water—hit some low points during operational testing in 2006, but is now moving forward. “We’ve got some good reports in recent weeks and months on the progress of EFV,” Conway said.

The Marines also have their sights on a new joint light tactical vehicle to replace the aging Humvee fleet. The Army, U.S. Special Operations Command, and the Marine Corps have teamed up to develop vehicles designed from the drawing board stage to operate in combat. Humvees were adapted after the fact for combat conditions.

"We certainly want to mate with the Army on any program for the joint light tactical vehicle, but I think it's fair to say both Services are still waiting for that technological breakthrough that's going to give us the amount of soldier and Marine protection in a vehicle that is lighter than what's on the market right now," Conway said.

The Marines are encountering the same problem as they attempt to develop a lighter, better productive helmet, he said.

"There is just not an apparent technological breakthrough in ceramics or in carbon fiber that's going to give us that lightweight technology that gives equal protection," he said.

Another program on the drawing board is the Marine personnel carrier, a medium-weight vehicle able to carry nine Marines and their gear. "We're going to try to sort out just what that vehicle needs to look like," Conway said.

Miles writes for American Forces Press Service.

PROGRAM EXECUTIVE OFFICE, ENTERPRISE INFORMATION SYSTEMS (AUG. 7, 2008)

PRICE NOMINATED TO BECOME FIRST ARMY ACQUISITION CORPS GENERAL OFFICER

Stephen Larsen

Col. N. Lee S. Price has been nominated by Defense Secretary Robert M. Gates for the rank of brigadier general in the U. S. Army. Her nomination for promotion has been confirmed by the Senate. She will be the first woman in the Army Acquisition Corps to be promoted to the rank of brigadier general and the first woman to become a general officer while serving in a special operations unit.

Recently assigned as the deputy program manager for the Army's Future Combat System (Brigade Combat Team) at Aberdeen Proving Grounds, Md., Price is responsible for managing development of the Future Combat System's integrated network. She previously served as the deputy acquisition executive for the U.S. Special Operations Command, MacDill Air Force Base, Fla. In that position she oversaw the procurement and acquisition of specialized equipment for the Special Forces community of Navy SEALs (Sea, Air Land), Army Rangers, the Air Force Special Operations units, and the Marine Special Operations Command.

Earlier in her career, Price served as the project manager, Defense Communications and Army Transmission Systems at Ft. Monmouth, N.J. For her work in that assignment (in which she managed multiple projects to provide commercial communications infrastructure for U.S. forces in Iraq, Afghanistan, and Kuwait), Price was honored as the Army's Project Manager of the Year for 2004 and was selected as one of the six best program managers in the Federal Government by *Federal Computer Week* magazine in July 2004.

Price's awards include the Defense Superior Service medal, Legion of Merit, the Bronze Star, numerous meritorious and achievement medals, and a Combat Action Badge.

Larsen writes for Project Manager, Defense Communications and Army Transmission Systems (PM DCATS) at Fort Monmouth, N.J.

AIR FORCE MATERIEL COMMAND NEWS RELEASE (AUG. 8, 2008)

GENERAL PEYER ASSUMES COMMAND OF AIR LOGISTICS CENTER

ROBINS AIR FORCE BASE, Ga.—Maj. Gen. Polly A. Peyer took command of the Warner Robins Air Logistics Center Aug. 7 during a ceremony at the Century of Flight Hangar at the Museum of Aviation. Peyer succeeds Maj. Gen. Tom Owen, who will become the director of logistics and sustainment for Air Force Materiel Command at Wright-Patterson Air Force Base, Ohio.

Peyer said she was excited to be taking command of the Air Logistics Center and looked forward to what the future has in store.

"This is the job I always aspired to have," she said. "This for me is the epitome of what I set out to do."

Gen. Bruce Carlson, AFMC commander, presided over the ceremony. Carlson told those in attendance that the Air Logistics Center is in great hands.

"I assure you Polly Peyer comes to you with the highest credentials as both a maintenance officer and a logistician," Carlson said.

Peyer came to Robins AFB from Headquarters U.S. Air Force, where she was director of resource integration in the office of the deputy chief of staff for logistics, installations and mission support.

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DAU ALUMNI ASSOCIATION RESEARCH PAPER COMPETITION 2009

The DAU Alumni Association, in partnership with the DAU Research Department, has announced the 2009 Annual Research Paper Competition. The theme for 2009 is "The Acquisition Workforce Challenge: Winning the War for Talent." Winning papers will receive cash prizes, be presented at the DAUAA Acquisition Community Symposium on April 14, 2009, and be published in the spring issue of the *Defense Acquisition Review Journal*. Non-DoD federal employees are also eligible for this competition. For details on preparation of papers, please go to <[www.dau.mil/Spotlight/doc/2008/DAUAA % 20Research % 20Paper % 20Competition % 202009 % 20- % 20final.pdf](http://www.dau.mil/Spotlight/doc/2008/DAUAA%20Research%20Paper%20Competition%202009%20-%20final.pdf)> .

DAU AND NDIA TO SPONSOR DEFENSE SYSTEMS ACQUISITION MANAGEMENT COURSE OFFERING FOR INDUSTRY MANAGERS

DAU and the National Defense Industrial Association will sponsor an offering of the Defense Systems Acquisition Management (DSAM) course for interested industry managers Dec. 8-12, 2008, at the Intercontinental Hotel and Resort in New Orleans, La.

DSAM presents the same acquisition policy information provided to DoD students who attend the Defense Acquisition University courses for acquisition certification training. It is designed to meet the needs of defense industry acquisition managers in today's dynamic environment, providing the latest information related to the following:

- Defense acquisition policy for weapons and information technology systems, including discussion of the DoD 5000 series (directive and instruction) and the CJCS 3170 series (instruction and manual)
- Defense transformation initiatives related to systems acquisition
- Defense acquisition procedures and processes
- The planning, programming, budgeting, and execution process and the congressional budget process
- The relationship between the determination of military capability needs, resource allocation, science and technology activities, and acquisition programs.

For further information see "Courses Offered" under "Meetings and Events" at <www.ndia.org> . Industry students contact Dani Rovenger, drovenger@ndia.org or call 703-247-2540. A limited number of experienced government students may be selected to attend each offering. Government students must first contact Karen Byrd, DAU professor of systems acquisition management,

at 703-805-5257, or e-mail karen.byrd@dau.mil prior to registering with NDIA.

DAU TRANSCRIPTS AVAILABLE

Professionals who have attended DAU courses can receive a transcript that provides a record of all courses completed at DAU as well as DAU course credit gained by completing an equivalent course, DAU course credit gained through the fulfillment program, and reserve retirement points (for military students only). It is the professional's and the component's responsibility to ensure equivalencies and fulfillments are properly recorded. Information about equivalencies and fulfillments is provided at <www.dau.mil/registrar/studentinfo/student_info_H.asp> .

To obtain your transcript, go to <www.dau.mil/registrar/faq.asp#transcript> and select "Get a Transcript." Transcripts reflect all DAU coursework successfully completed since the university's founding in 1993 and coursework that has been processed through the Army Training Requirements and Resources System (ATRRS). To obtain training records of courses obtained prior to 1993, contact the school at which the training was taken. Questions regarding transcripts should be directed to DAU Student Services at dau.transcript@dau.mil.

DEFENSE ACQUISITION PORTAL

Coming to you in May 2009! DAU is facilitating the development of a Defense Acquisition Portal addressing all of the life cycle processes in DoD acquisition, including joint requirements definition and analysis; human systems integration and human capital initiatives; budget and financial management; and overarching systemic DoD policy, guidance, and direction. The DAP will provide an access "gateway" to all things related to the "Big A" processes and products under one sharing umbrella. Content on the DAP home page will be general in nature, focusing on news, announcements, training, search functions, Ask-a-Professor, and similar services. Icons at the top of the page will provide Web 2.0 tools for e-mailing the page and bookmarking. Tabs across the top of the white space provide navigation to major elements of interest to the acquisition workforce. Watch the Acquisition Community Connection Web site at <<https://acc.dau.mil/CommunityBrowser.aspx>> for updates.

ACQUIPEDIA: IT'S ABOUT COLLABORATION

Ever needed more information on a topic than what's in the DAU Glossary but less than an entire manual? *Acquipedia* is a new initiative being developed to bring common acquisition topics and terms into an encyclopedia-

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type format. ACQuipedia is intended to be a collaborative, peer-created reference tool for sharing authoritative information on topics of interest to the acquisition community. Information is presented in articles that contain a brief definition or description of the topic and a narrative that provides further detail. An ACQuipedia article will also contain links to relevant policies and directives, guides and tools, training, and other resources. This will provide the workforce with quick access to the information they seek, tailored to their specific needs. ACQuipedia articles will be created by DAU faculty and staff, as well as by qualified subject matter experts from outside the university. Watch the ACC Spotlight feature at <<https://acc.dau.mil/communitybrowser.aspx>> for more information as it becomes available.

GREEN PROCUREMENT

Learn about federal green purchasing requirements by completing the Defense Acquisition University's new on-line continuous learning module, Green Procurement, CLC 046 <<https://learn.dau.mil/html/clc/clc1.jsp?cl=>>. Green procurement is the purchase of products and services with favorable energy or environmental attributes in accordance with federally mandated "green" procurement preference programs. The DoD Green Procurement Program is a comprehensive strategy for implementing environmentally preferred practices while sustaining the overall mission. The overall objective of this course is to identify the objectives and background of DoD's Green Procurement Program. This module takes approximately two hours to complete. It contains an end-of-module test that must be passed with a 100 percent score. Students will have unlimited attempts to pass the test and, upon completion, will receive two continuous learning points, an electronic certificate of completion in their ATLAS account, and a record of completion entered into their DAU transcript.

AT&L KNOWLEDGE MANAGEMENT SYSTEM (AKMS) VIDEOS

Defense Acquisition University's Knowledge Sharing team has developed a Web site where users can view short videos describing all of the systems that make up the AT&L Knowledge Management System (AKMS), as well as other information in the form of briefs and online tutorials. A login is not required. DAU's goal is to clarify the different knowledge sharing assets and tools that are available to users through the AKMS, 24/7, absolutely free, at <<https://acc.dau.mil/at&lkm>>.

- AT&L Knowledge Management System Overview
- AT&L Knowledge Sharing System
- Acquisition Community Connection

- Best Practices Clearinghouse
- ACQuire Search Engine
- ACQuipedia
- Integrated Framework Chart
- Defense Acquisition Guidebook
- Ask-A-Professor.

CONTINUOUS LEARNING MODULE REQUEST PROCEDURES

The Defense Acquisition University e-Learning and Technologies Center (e-LTC) and the Learning Capabilities Integration Center (LCIC) are sponsoring a Web site for Continuous Learning Module (CLM) requests at <http://clc.dau.mil/clm_index.asp>. The site provides step-by-step procedures, useful references, and other needed information to assist the requestor. For example, the site contains content samples, references, process business rules, proposal forms, and other tools. DAU's intent is to provide the defense acquisition, technology, and logistics workforce an accessible DAU Web site to more effectively communicate the CLM request process to DAU faculty and staff. The DAU CLM site addresses new developments, major revisions, maintenance, and hosted requests.

DAU'S CENTER FOR SIMULATION, TRAINING AND RESEARCH (C-STAR)

As part of DAU's ongoing effort to "train as we operate," the Center for Simulation, Training, and Research (C-STAR) is focused on organizational team training in which teams of acquisition personnel from the same organization will move through training rotations together. DAU faculty are developing learning assets specifically designed to exploit this capability. The C-STAR is currently operational at DAU's main campus at Fort Belvoir, Va.

The center features a number of cutting-edge technologies including 40 state-of-the-art computers and two MERL Diamond-touch tables, which allow the user to interact with PC-based simulations using a touch screen. The main room will also feature a sufficient number of projection or display screens so that up to six groups can work in the center at any one time. Additionally, a gaming lab will explore the potential of using technologies such as gaming consoles as a way to interact with the AT&L workforce. Phase Two of the C-STAR build-out will be completed in FY 2008. DAU's Phase Three plan includes such additions as telepresence, creating a live, face-to-face meeting experience over the network. Similar sites are being planned for use at DAU locations across the country. The center will also be supporting the activities of DAU's legacy Manage-

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ment Deliberation Center. For more information, contact Mark Oehlert at mark.oehlert@dau.mil.

SOLICITATION FOR DEFENSE SENIOR LEADER DEVELOPMENT PROGRAM CLASS OF 2009

The Defense Senior Leader Development Program (DSLDP) is the Department of Defense program to develop senior civilian leaders to excel in the 21st century joint, interagency, and multi-national environment. This program supports the government-wide effort to foster interagency cooperation and information sharing by providing opportunities to understand and experience firsthand the issues and challenges facing leaders across DoD and the broader national security arena. Designed to support one of the department's top transformational priorities, DSLDP is the senior-level component of DoD's overall leader development strategy. The program provides the means to develop a cadre of world-class senior civilian leaders with the enterprise-wide perspective and the critical skills needed to lead organizations and achieve results in the national security environment today and well into the future.

Who should be nominated for DSLDP?

DSLDP is designed for those who are leading high-performing organizations and programs today, and have the potential and motivation to take on even more responsible senior leadership positions across the enterprise within the next few years. Candidates should be identified through their respective component or agency talent management processes, with an eye toward utilization of graduates in the joint arena and return on investment for the department. Successful nominees will pursue program elements as a cohort over the next two years, including attending professional military education beginning in August 2009. Only those with the capability, commitment, and leadership support to pursue a rigorous two-year development program should be nominated. To download specific eligibility requirements and additional guidance on identifying candidates, go to <www.cpmis.osd.mil/>.

AIR FORCE PRINT NEWS (JULY 10, 2008) AF INTRODUCES CIVILIAN ACCULTURATION, LEADERSHIP PROGRAM

WASHINGTON—Applications are now being accepted from Air Force civilian interns and Student Career Employment Program (SCEP) graduates for the Civilian Acculturation and Leadership Training (CALT) program.

This opportunity is a chief of staff initiative designed as an intensive leadership development program for civilians new to the Air Force.

"This is truly a first-of-its kind opportunity for our civilians," said Joseph McDade, force development director for the deputy chief of staff for manpower and personnel. "This in-residence acculturation and leadership training program ensures a balanced portfolio of leadership development for all airmen—officers, enlisted, and civilians."

"The Air Force is at a historic crossroad with regards to our civilians," McDade said. "As we've drawn down, civilian leadership opportunities have increased, particularly among our support communities. The program stems from the need to ensure our civilian developmental paths are as deliberate as those of every other airman."

Modeled on the Officer Training School curriculum, the program provides an in-residence experience focused on Air Force culture and missions. Civilian participants will live under the same rules and conditions as OTS candidates. They will live in the OTS dorm and eat in the OTS dining facility.

The curriculum will also parallel the leadership modules taught at OTS and will include team-building exercises, some outdoor activities, simulation exercises, and time for personal health and wellness to help maintain a level of physical fitness. It is an intensive leadership development program and will entail outside reading and projects.

CALT is a pilot program consisting of four classes with 25 students each, for a total of 100 graduates in fiscal year 2009. Participant feedback will drive its future. Classes will be taught at Maxwell Air Force Base, Ala. Volunteers may select a primary and alternate date; however, final class dates will be based on Air Force needs. The first class is scheduled for Oct. 27 to Nov. 7.

Interested civilians must be in the COPPER CAP program, which hires contract specialists only, or the PALACE Acquire program, which hires from various career fields. Also eligible are graduates of SCEPs. Candidates must self-nominate and also have two to three years of continuous Air Force service before May 31, 2009, no previous military experience, a bachelor's degree, and exhibit leadership qualities.

For more information, call Dianne Cheatham at DSN 225-9090 or 703-695-9090.

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AMERICAN FORCES PRESS SERVICE (AUG. 5, 2008) **PANEL RECOMMENDS CHANGES TO MILITARY RETIREMENT**

Jim Garamone

WASHINGTON—A panel looking at military compensation has recommended dramatic changes in the military retirement system.

The recommendations are part of the second volume put out by members of the 10th Quadrennial Review of Military Compensation (QRMC).

The first volume, released in March, looked at cash compensation. Retired Air Force Brig. Gen. Jan D. “Denny” Eakle was director of the panel, and she briefed the press during a Pentagon news conference Aug. 5.

Eakle said critics of the current military retirement system say it is not equitable, it is not flexible, and it is not efficient.

“There is a perception that the system we have today is inequitable because only 15 percent of all enlisted personnel and less than half of officers will ever receive anything in the system,” she said.

Reserve Component personnel also believe the current system discriminates against them, especially at a time when Reserve forces are being called on more, she said.

The retirement proposal would offer a defined benefit, defined contributions, “gate” pays, and separation pays.

The defined benefit would be 2.5 percent of the average basic pay for the highest 36 months of the individual’s career multiplied by the number of years of service, with servicemembers vested at 10 years of service. Payments to retirees would begin at age 60 for those with less than 20 years of service and at age 57 for those with 20 years of service or more.

Servicemembers could opt for an immediate annuity, but the payout would follow the Federal Employee Retirement System methodology: a 5 percent penalty per year for early withdrawal.

The defined contribution portion would be an automatic government-funded Thrift Savings Plan. Servicemembers would not have to match any government payment. The government would not put any money in for the first year, but would put in 2 percent of base pay for two years of

service, 3 percent for three and four years of service, and 5 percent for five and more years of service. Again, this would be vested after 10 years of service.

The military also would make “gate pays” to servicemembers who reach specific years of service. These would vary by years of service and skills, Eakle said.

“This is a payment made for achieving a particular year of service,” she explained. “And within the Services, they would have the flexibility to vary this by years of service as well as by skill. That way, they could begin to shape the skills by dragging people further into their career by offering them an incentive.”

Finally, the system would include separation pay to servicemembers that would also vary by years of service and skills.

“The separation payments would be made available by the Service to members that they wished to entice to leave,” Eakle said. This would be a permanent tool Services would have available, she added.

The panel used a Rand Corporation computer model to test the recommendations, but Eakle said the panel members would like a large-scale test in the Defense Department.

“Therefore, the recommendation of this QRMC is that the Department of Defense conduct a multi-year test of the system,” Eakle said. “The way the test would work is this: All four Services would be asked to identify some skills that have different types of retention patterns—some that stay not very long, some that stay longer periods of time—and ones they wish to influence.”

The test would offer people in those skills in the first eight years of service an opportunity to volunteer.

“If someone was selected for the test, they would be paid all of the Thrift Savings Plan that they should have earned up until that point, and it will be put in their TSP account for them,” she said. “The program’s vesting rules would, in fact, apply to all those individuals. So should they achieve 10 years of service while they are in the test, they would fully own it.”

At the end of the test period, people who are in the new system who wish to revert to the original retirement system would be allowed to do so, she said.

Any change in the retirement system would require action by Congress. DoD officials said they will carefully examine the panel's recommendations and then decide if they should move forward. The study will take at least six to 12 months, so any decision would be made by the next administration, DoD officials added.

Garamone writes for American Forces Press Service.

AIR FORCE PRINT NEWS (AUG. 13, 2008) EVALUATIONS RELEASE HIGHLIGHTS VPC-GR EVOLUTION

Master Sgt. J.C. Woodring, USAF

DENVER—When the new online evaluations process for coordinating performance reports launched in July, it quickly became a shining example of the capabilities of the virtual Personnel Center—Guard and Reserve.

Since it launched, nearly 1,400 Reservists and Guardsmen have begun coordinating the online performance reports, and the first was successfully loaded into the Automatic Records Management System on July 24.

"This is a great example of the vPC-GR's capability to let our airmen submit their forms and have a systematic visibility on their status throughout the chain of command," said Dave Gallop, Air Reserve Personnel Center's Directorate of Personnel Data Systems director.

The earlier version of the process, which was only available to Reservists, would let performance reports be uploaded into vPC-GR, but there wasn't the online coordination or visibility.

"Commanders could have reports in coordination without knowing their status," said Lt. Col. Doug Ottinger, ARPC's Directorate of Future Operations director. "Now, Guard and Reserve commanders can know exactly where all their reports are by looking on vPC-GR."

At the genesis of their Web-based services in December 2005, ARPC officials allowed customers to request a copy of their 20-year and mortgage letters and print them from their own computer. Also, officers could submit a letter to the promotion board or request promotion board counseling.

This happened before the real push by Air Force officials to meet a secretary of defense mandate for the military to catch up and use more technology to free up limited personnel resources. In the personnel world, Air Force of-

ficials were required to transform the way they delivered personnel services.

"We wanted to create a system where any of our customers could log in and request any service we provide at their convenience from anywhere in the world," said Craig Carter, a software engineer in DPD. "Then, we could get back to them with a response within a reasonable timeframe."

ARPC specialists began filling online requests for documents since switching to new software in October 2004, Carter said.

"The 20-year and mortgage letters process was our first process that didn't require anyone to do anything on the back end. The computer did all the work for us," he said.

A vast majority of the requests, like duty history changes and address updates, need a person to handle the issues before they can be closed. These are referred as Tier 1 transactions and are normally completed by customer service counselors who work in the Reserve Personnel Contact Center. If special attention is needed, it is referred to Tier 2.

"These letters are examples of Tier 0 service at its finest," Ottinger said. "The customer knows what he wants and the computer automatically gives it to him."

While not all the processes can fall into Tier 0, the six Air Force civilian developers still are working to make services easier for customers.

In the past couple years, ARPC developers launched online processes for customers to apply for retirement and nominate airmen for decorations.

One of the most significant changes to the system came in December 2007 with the launch of the vPC-GR Dashboard. This tool gave people a centralized place to see anything that was being processed in the system, he said. Specifically, it gave leaders and people in key positions within the organization the ability to see the status of transactions within their area of responsibility.

"With where we are around the world in many different and varied areas, giving our members access is crucial ... so they know and have a comfortable feeling that their records are right," said Lt. Gen. Charles E. Stenner Jr., chief of Air Force Reserve and commander of Air Force Reserve

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Command. "Personnel services delivery transformation ... is helping us keep pace in line with the ops tempo of today's world and how we deploy around the world."

So far, the vPC-GR has processed tens of thousands of transactions since its first official capability—duty history updates for the Reserve—was launched in March 2006.

While most of the items that the developers have planned are enhancements to existing applications, there are still a couple Air National Guard-specific applications in the works like requests to separate.

"As developers, we have total control over vPC-GR applications and our case management system," Carter said. "If an urgent change is needed based on customer feedback, mandated changes, or to fix a problem, we have the local talent and flexibility to make these changes quickly."

As the military transitions to the Defense Integrated Military Human Resources System, Carter said he doesn't see his role disappearing when they flip the switch.

"Very few programs meet all of their customers' needs when they first hit the street. We'll be prepared to provide development support for customer processes during the transition to DIMHRS and migration to the new consolidated case management system," he said.

"All of the online applications we're creating are helping us get comfortable with using online transactions, which will continue to increase as the military transitions to DIMHRS," said Senior Master Sgt. Melody Mohigh, Reserve change manager.

"We want to make it as easy as possible for our customers," Ottinger said. "As we receive feedback from the field, we evaluate it to see if there is anything we can do to make it easier for our customers as a whole."

Woodring writes for Air Reserve Personnel Center Public Affairs.

AIR FORCE PRINT NEWS (AUG. 18, 2008) UPDATING EDUCATION JUST CLICKS AWAY FOR CIVILIANS

RANDOLPH AIR FORCE BASE, Texas—Air Force civilian employees who wish to update education information in their civilian personnel records have a new, easier way to do so: through the MyBiz Web site.

MyBiz is the self-service module in the Defense Civilian Personnel Data System. Instead of faxing their transcripts and waiting for someone to update their record, employees can now do it themselves.

"The Air Force, in conjunction with the Department of Defense, has been working to streamline and automate the manual processes of updating education, training, and special qualifications (certifications, professional licenses) into a Web-based self-service capability," said Kathryn Houston from the Civilian Future Operations Branch at the Air Force Personnel Center.

"Now, in addition to updating work and home telephone numbers, e-mail addresses, handicap codes, ethnicity and national origin, and language, employees can update their education through MyBiz, and it is immediately reflected in their personnel record. In the future, MyBiz will provide even more update capabilities."

The goal is to provide faster and smarter service to employees by giving them the ability to go in and update their important career information themselves, so it can be immediately reflected in their personnel record.

Prior to this change, employees could update some personal information, but not education. They had to follow a process that included completing sections of an OF 612 and faxing copies of transcripts to the Air Force Manpower Agency, who then put the information into the system.

Now, employees can update their own education information. They will be required to provide personnel a transcript only if personnel has a legal or regulatory requirement to verify the education entry, for example, if, based on the qualification standards, a position requires a degree or a specified number of course hours (this is often referred to as a "positive education" requirement).

For more information, visit AFPC's "Ask" Web site and search for "Education Updates" or call the 24-hour Air Force Contact Center at 800-616-3775.

Conferences, Workshops & Symposia

34TH INTERNATIONAL SYMPOSIUM FOR TESTING AND FAILURE ANALYSIS

The 34th International Symposium for Testing and Failure Analysis will be held Nov. 2–6, 2008, in Portland, Ore. Technical symposia, user groups, seminars, short courses, and the largest equipment exposition in the industry make ISTFA the best place to learn, network, and accelerate your career. Original, unpublished, and novel material will be presented on testing, analysis, characterization, and metrology of electronic devices and systems from nanoscale to macroscale. For additional conference information, e-mail ASM International at customer.service@asminternational.org; call 440-338-5151, ext. 0; or fax 440-338-4634.

FALL PEO/SYSCOM COMMANDERS' CONFERENCE

The fall 2008 Program Executive Officer/Systems Command (PEO/SYSCOM) Commanders' Conference, will be held Nov. 4–5, 2008, at the Defense Acquisition University, Fort Belvoir, Va. The PEO/SYSCOM Commanders' conferences are a series of senior-level, invitation-only, non-attribution events that host approximately 300 Department of Defense and industry participants at each event. The annual forum provides a good opportunity for senior leadership from DoD and industry to meet and share their views and priorities. The point of contact for the 2008 conference is Alphronzo "Al" Moseley at alphronzo.moseley@dau.mil or call 703-805-4639.

22ND INTERNATIONAL PROJECT MANAGEMENT ASSOCIATION WORLD CONGRESS

The 22nd International Project Management Association World Congress will be held Nov. 9–11, 2008, in Rome, Italy. Project Management skills are closely connected with business development and management skills, delivery skills, and economic performance. The simple truth is that more project-oriented employees better support the company strategy. Portfolio and program management must be based on the real strategic goals of the enterprise. It takes several years to develop a company culture that is truly project-oriented. The 22nd IPMA World Congress has taken up the challenge of accelerating that pace of development. For more information, go to <www.ipmaroma2008.it>.

NATIONAL NANO ENGINEERING CONFERENCE (NNEC 2008)

The National Nano Engineering Conference (NNEC) 2008 will be held Nov. 12–13, 2008, in Boston, Mass. NNEC is the premier event focused on current and future develop-

ments in engineering innovations at the nanoscale, as well as the commercialization of nanotechnology. For more information e-mail Luke Schnirring at luke@abpi.net; call 212-490-3999; or fax 212-986-7864.

7TH ANNUAL LIGHT ARMORED VEHICLES AND STRYKER SUMMIT

The 7th Annual Light Armored Vehicles and Stryker Summit will be held Nov. 17–20, 2008, at the Sheraton Premier at Tysons Corner in Vienna, Va. The theme of the 2008 summit is "Extending the Life and Capabilities of a Proven Force Multiplier." This year's event will examine areas of opportunity in the family of LAV vehicles; newly fielded models; and explore aspects of the vehicle, including armor, communications, firepower, drive trains, battery power, and other important components. For more information on the summit, e-mail the Institute for Defense Government Advancement at info@igda.org; call 800-882-8684; or fax 646-378-6026.

AIAA MISSILE SCIENCES CONFERENCE

The American Institute of Aeronautics and Astronautics (AIAA) Missile Sciences Conference will be held Nov. 18–20, 2008, at the Naval Postgraduate School in Monterey, Calif. The AIAA Missile Sciences Conference provides a forum to present and discuss technical subjects related to missile systems and subsystems. **This conference is classified SECRET U.S. ONLY.** Take advantage of this comprehensive conference agenda to share your missile science technologies with the missile defense community. For more information on the conference, e-mail Cathy Chenevey at custserv@aiaa.org; call 703-264-7500; or fax 703-264-7551.

AEROTEST AMERICA 2008

AeroTest America 2008 will be held Nov. 18–20, 2008, in Fort Worth, Texas. Participants will be exposed to the world of aerospace engineering analysis, testing and evaluation, measurement, inspection, monitoring, compliance, and certification—all under one roof. Other topics covered will be aerodynamics structures and fatigue, engines/propulsion, materials, electronics, cables and wiring, avionics and databus, hydraulics/fluid power, acoustics, vibration and shock, mechanical/mechatronic, software/embedded system, fuels/fuel systems, telemetry, data acquisition, sensors and transducers, EMC/environmental impact and safety, and more. For more information on the 2008 conference, e-mail nancy.roediger@aerotestamerica.com or call 1-800-913-5022.

Conferences, Workshops & Symposia

1ST ANNUAL LEADERSHIP CONFERENCE: "A DIALOGUE ON ACQUISITION LEADERSHIP"

The Defense Acquisition University-South Region/Senior Service College Fellowship, The University of Alabama in Huntsville, and Team Redstone will co-sponsor the 1st Annual Leadership Conference: "A Dialogue on Acquisition Leadership." This first event, a learning conference facilitating the exchange of best practices and ideas, will be held at the Von Braun Center in Huntsville, Ala., on Nov. 20, 2008. Successfully transforming DoD acquisition depends on leaders at all levels communicating a clear and consistent strategy for continuous improvement in DoD's acquisition processes. This conference supports the Senior Service College Fellowship vision of a leadership forum. Acquisition, warfighter, industry, and political senior leaders will provide their views on strategies to successfully transform DoD acquisition processes. Register now to reserve a place at < www.coned.uah.edu/jsp/leadershipconf08.jsp > .

GOVERNMENT CONTRACT MANAGEMENT CONFERENCE 2008

The Government Contract Management Conference 2008 will be held Nov. 20–21, 2008, at the Bethesda North Marriott Hotel and Conference Center in Bethesda, Md. This year's theme will be "Accountability in Government Contracting: Restoring Public Trust." Connect with business, legislative, and political professionals to see how innovative acquisition and contract management processes can improve performance and enhance the bottom line for both government and industry. Explore recent and pending legislation, federal budgeting, service contracting, best practices, and small business utilization, with outstanding speakers from government agencies, industry, private practice, and academia. As an added bonus, earn up to 12 hours of continuing education by attending this two-day conference. Register at < www.ncmahq.org/Events/ConferenceList.cfm?navItemNumber=532 > .

26TH ARMY SCIENCE CONFERENCE

The 26th Army Science Conference, sponsored by the assistant secretary of the Army for acquisition, logistics and technology, will be held at the JW Marriott Grande Lakes, Orlando, Fla., Dec. 1–4, 2008. The theme of the 2008 conference is "Transformational Army Science and Technology: Harnessing Disruptive S&T for the Soldier." ASC aims to promote and strategically communicate that the Army is a high-tech force, enable the public to understand what the Army S&T community does to support the soldier, and enable conference attendees to better appreciate the potential of emerging technologies to provide

disruptive capabilities that future soldiers may leverage to their advantage. The audience is expected to include representatives from government, academia, and industry from both the United States and over 25 foreign nations. Register at < www.asc2008.com > .

NEXT-GENERATION MATERIALS FOR DEFENSE—NGMD 08

The Next-Generation Materials for Defense, NGMD 2008, will be held Dec. 8–10, 2008, at the Hilton Arlington, in Arlington, Va. Military operations and the presence of American officials and forces around the world have made the development of advanced materials for defense a key investment for the U.S. military. NGMD 2008 will provide key insight into current material needs and requirements as well as application possibilities for various materials technologies that are currently under development. For more information, e-mail the Institute for Defense Government Advancement at info@igda.org; call 800-882-8684; or fax 646-378-6026.

AIR FORCE PRINT NEWS (JULY 14, 2008) OFFICIALS CONDUCT 'ROAD SHOW' FOR ACQUISITION TRANSFORMATION

WASHINGTON—The Installation Acquisition Transformation initiative, a comprehensive restructuring of continental U.S. installation acquisition practices, is moving forward as Air Force contracting officials continue traveling to affected bases to explain the changes ahead. Under the transformation, Air Force Materiel Command at Wright-Patterson Air Force Base, Ohio, will head five geographically based installation acquisition groups, leaving only a small contracting presence at each installation.

The IAT Road Show began in February and has already visited bases in the Southwest, Midwest, and Southeast. Col. Mark Hobson, provisional director for the newly formed Installation Acquisition Center at Wright-Patterson AFB, heads the Road Show team and said he is excited about meeting with the contracting workforce and local industry. The complete transformation is anticipated to take three to five years, with the first positions migrating to the installation acquisition groups between fiscal years 2010–2012. IAT only applies to continental U.S. installation buying activities and does not apply to major weapons systems and their logistical support, laboratory support, or research, development, test, and evaluation.

For more information about the Road Show, visit the IAT Web site at < <http://ww3.safaq.hq.af.mil/factsheets/factsheet.asp?id=11457> > .

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AIR FORCE MATERIEL COMMAND NEWS RELEASE (AUG. 1, 2008) AFMC RECEIVES \$50 MILLION FOR ENERGY PROJECTS

Michelle Eviston

WRIGHT-PATTERSON AIR FORCE BASE, Ohio—The Air Force has awarded more than \$50 million to Air Force Materiel Command to fund energy projects under Air Force Smart Operations for the 21st century.

The July announcement comes seven months after the Air Force's chief engineer put out a call for energy projects. In response, members of the AFMC communications, installations, and mission support directorate submitted 80 ideas.

"The projects are a combination of initiatives from within AFMC and those from coordination with other energy offices," explained Maj. Jack Wheeldon, AFMC infrastructure and facilities chief.

Out of the 80 project ideas, 30 were submitted for AFSO21 funding and 26 were approved. Another 26 projects were approved under fiscal 2010 Energy Program Objective Memorandum funding.

The majority of the approved AFSO21 funding will be used to buy out 15 energy savings performance contracts. An ESPC is when the Air Force contracts out a project with the intent to pay off the contractor's capital investment with that project's energy savings. However, sometimes older or lengthy contracts carry high interest rates. When the Air Force buys out these contracts, it saves money by avoiding further interest costs.

The remaining 11 AFSO21 projects are considered fast payback items, a key requirement to receive AFSO21 funds. To be considered, the ideas had to be construction projects with savings that will pay back initial investment costs in less than seven years.

The approved projects range from installing simple money-saving upgrades to the total replacement of conventional systems. For example, one project is to install infrared devices on vending machines. These devices will control the lighted fronts of the machines so they will not turn on until someone steps within their set range of motion. This project's energy savings will pay off its capital investment in a little more than two years, and then continue to save the Air Force money thereafter.

A more complex project involves replacing antiquated steam heating systems with more efficient electric heat pumps that use the natural thermal properties of the earth. This project not only consumes less energy but also avoids the associated cost of maintaining an older system.

These and the rest of the AFSO21-funded projects will begin to see savings upon the completion of their contracts and construction during fiscal year 2010.

Eviston writes for Air Force Materiel Command Public Affairs.

DEPARTMENT OF DEFENSE NEWS RELEASE (AUG. 4, 2008) 2008 MAINTENANCE AWARD WINNERS ANNOUNCED

The Department of Defense today announced the 2008 winners of the Secretary of Defense Maintenance Awards at the depot and field levels. These awards are presented annually to recognize outstanding achievements in military equipment and weapon systems maintenance.

The Robert T. Mason Depot Maintenance Excellence Award recipient is the H-1 Aircraft Production Program at the Navy's Fleet Readiness Center East, Cherry Point, N.C. The program provided exceptional and responsive aviation maintenance and logistics support to the operational forces and its many and varied warfighters/customers around the world.

The depot-level award is named in recognition of Robert T. Mason, a former assistant deputy under secretary of defense for maintenance policy, programs, and resources. Mason served as the champion of organic depot maintenance for three decades, while helping to transform DoD organic depot-level operations.

There are six field-level awards presented in the categories of large, medium, and small units (two each). The recipients of this year's Secretary of Defense Field-level Maintenance Awards are as follows:

- For the large category, the Army's 3rd Battalion, 43rd Air Defense Artillery, Fort Bliss, Texas, and the Air Force's 1st Special Operations Maintenance Group, Hurlburt Field, Fla.
- Winners in the medium category include the Navy's Fleet Readiness Center Northwest, Whidbey Island, Wash., and the Air Force's 31st Aircraft Maintenance Squadron, Aviano, Italy.

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- Small category winners include the Army's Bravo Company, 610th Brigade Support Battalion, Fort Riley, Kan., and the Marine Fighter Attack Squadron 312, Beaufort, S.C.

The awards will be presented to the winners at the Secretary of Defense Maintenance Awards banquet on Oct. 29, 2008, during the 2008 DoD Maintenance Symposium and Exhibition at the Hyatt Regency Hotel in Denver, Colo. Additional information regarding the 2008 DoD Maintenance Symposium and Exhibition can be found at < www.sae.org/dod > .

AIR FORCE MATERIEL COMMAND NEWS RELEASE (AUG. 18, 2008) **TEAMWORK AMONG DEPOTS KEEPS T-38S FLYING**

Brandice Armstrong

TINKER AIR FORCE BASE, Okla.—Workers from the Oklahoma City Air Logistics Center's 76th Maintenance Wing combined with Air Force Materiel Command's other two depots in a round-the-clock push to make hundreds of levers, helping Air Force officials keep the T-38 training jet flying.

The effort came on the heels of an investigation into a T-38 crash at Sheppard Air Force Base, Texas, in which two pilots were killed. Investigators discovered the T-38 aileron actuator lever, a flight control, was a contributing factor.

Ogden Air Logistics Center personnel at Hill Air Force Base, Utah—the ALC responsible for repairing the T-38—asked for help once officials determined approximately 1,600 left and right aileron actuator levers were needed immediately. Otherwise, senior Air Force officials would consider grounding the entire fleet, which is crucial for pilot training.

In late July, Ogden ALC officials asked Oklahoma City ALC personnel to manufacture 800 left levers. Ogden personnel teamed with counterparts at Warner Robins ALC, Robins Air Force Base, Ga., to manufacture the right levers.

"This effort really exemplifies how the three ALCs, by working together as a team, can rapidly respond to almost any warfighter need," said Col. Jeffrey Sick, 76th Commodities Maintenance Group commander. "This is the way of the future, and we can see it from where we sit today."

Working around the clock and on weekends, Tinker officials agreed to produce 50 left levers by Aug. 18. An ad-

ditional 50 levers will be produced weekly until the order of 800 levers is complete.

"Our folks are totally dedicated," said Herman Dave Sanchez, 552nd Commodities Maintenance Squadron Accessories Division director. "We notified them of this particular project and the urgency of it, and they all marched out and did their jobs. They executed to get the part prototyped and in production in record time."

Prior to Tinker's involvement, Ogden ALC personnel obtained aileron actuator levers from a contractor through the Defense Logistics Agency. Because of the technical compliance technical order at hand, Ogden ALC personnel would not be able to obtain the required 1,600 parts quickly enough.

Glenn Berglan, 552nd CMMXS Local Manufacturing Flight chief, said the project is an example of the work they do every day.

"It gives us the opportunity to showcase what we're about and what we can do, especially our rapid manufacturing capabilities," he said.

Armstrong writes for 72nd Air Base Wing Public Affairs.

NAVY NEWSSTAND (AUG. 22, 2008) **NSWC CRANE SAVES \$970K FOR NAVSEA SMALL ARMS OFFICE**

CRANE, Ind.—Naval Surface Warfare Center (NSWC) Crane, a Naval Sea Systems Command (NAVSEA) field activity, deployed more than 1,300 M4A1 carbine rifles to sailors worldwide this summer while saving taxpayers more than \$970,000.

The cost savings resulted from repairing and reusing weapons parts, combined with savings in labor and shipping processes. NAVSEA is responsible for executing the mission effectively, delivering the products the warfighter needs, and for improving the processes continuously.

The M4A1 carbine is an assault rifle configuration of the M16 and is an upgrade of the MK18 Mod 0 carbine. The weapon is outfitted with a close-quarter battle receiver (CQBR) to support sailors conducting visit, board, search, and seizure (VBSS) missions and maritime security operations throughout the world.

"This project is extremely beneficial to the sailor," said Gary Mesarosh, NSWC Crane Small Arms Maintenance and Overhaul branch representative. "This initiative re-

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sults in improved mission readiness for our sailors. The entire arsenal of VBSS weapons has been overhauled, which means there is continued confidence in their primary assault carbine.”

“NSWC Crane Special Missions Center experts are responsive to the warfighters’ needs, and this project shows the dependability and importance of NSWC Crane in providing innovative solutions to issues and problems that benefit the warfighter,” said Bobby Just, NSWC Crane Special Missions Center.

Media contact: Naval Surface Warfare Center Crane Corporate Communications. For more news from Crane Division, Naval Surface Warfare Center, visit <www.navy.mil/local/crane/>.



Master-at-Arms 2nd Class Jayson Wazny, from Beaverton, Mich., and other members of helicopter visit, board, search and seizure Team 2 fire M4 rifles during a live fire transition exercise aboard the Nimitz-class aircraft carrier USS Abraham Lincoln (CVN 72). Photo by Mass Communication Specialist 2nd Class James R. Evans, USN

OFFICE OF THE DEPUTY ASSISTANT SECRETARY OF THE NAVY FOR SAFETY (AUG. 22, 2008) **2008 DON SAFETY EXCELLENCE AWARD RECIPIENTS ANNOUNCED**

WASHINGTON—Secretary of the Navy, Donald C. Winter announced Aug. 19 the 2008 Department of the Navy’s (DoN) Safety Excellence Award winners.

“Your integration of ‘mission first, safety always’ into your commands’ culture was superlative during [fiscal year] 2007, and you have justly earned the right to fly my safety flag through the next year,” said Winter in his message that announced the recipients.

The 18 winners are: Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility; Commander, Fleet Activities Okinawa; USS *Enterprise* (CVN 65) with Carrier Air Wing 1; USS *Lake Erie* (CG 70); USS *Rushmore* (LSD 47); MCM Crew Persistent; USS *Columbus* (SSN 762); Marine Corps Air Station New River; 1st Marine Aircraft Wing; Marine Corps Logistics Base Albany; Marine Light Attack Helicopter Squadron 269; Helicopter Anti-Submarine Squadron Light 42; Fleet Logistics Squadron 56; Marine Light Attack Helicopter Squadron 773; Training Squadron 31; USNS Lewis and Clark (T-AKE 1); and the Submarine Rescue Diving and Recompression System Team, Advanced Undersea Systems Program Office (PMS 394).

All recipients are presented with the Secretary of the Navy’s distinctive white-and-green safety flag, which they are entitled to fly for one year.

This was the second consecutive year the Submarine Rescue Diving and Recompression System Team has received the award. It’s the first time that a command has won in two different categories. Marine Light Attack Squadron 269 is the recipient in both aviation and ground safety.

This year’s award categories include safety ashore, safety shipboard, Marine Corps ground safety, aviation safety, Military Sealift Command safety, and safety in the field of acquisition.

The secretary of the Navy also announced that Naval Air Station Key West and Marine Corps Logistics Base Barstow have earned “star” level of safety excellence from the Occupational Safety and Health Administration’s Voluntary Protection Program. Star is OSHA’s highest level of safety achievement. MCLB Barstow is the first Marine Corps command to earn its star. The commands will receive a special plaque at the awards ceremony.

There are only seven commands DoN-wide that have reached Voluntary Protection Program star status.

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The Department of the Navy Safety Excellence Awards were established in 2002 by [Deputy Secretary of Defense] Gordon R. England to personally recognize Navy and Marine Corps commands that demonstrate extraordinary excellence by sustained mission success with simultaneous exemplary safety performance.

For more news from the Naval Safety Center, visit < www.navy.mil/local/nsc/ > .

AIR FORCE PRINT NEWS (AUG. 25, 2008) WRIGHT-PATTERSON UNIT WINS DEFENSE SECRETARY LOGISTICS AWARD

WASHINGTON—Defense Department officials announced Aug. 6 that the 478th Aeronautical Systems Wing was named the winner of the Secretary of Defense System Level Performance-Based Logistics Award.

The wing staff directs all acquisition and sustainment activities for the F-22 Raptor and is part of the Aeronautical Systems Center at Wright-Patterson Air Force Base, Ohio.

The award recognizes the unit with the best strategy to improve weapon system readiness through performance-based logistics contracting with weapons system manufacturers and the Air Force's three air logistics centers. Members of the 478th AESW demonstrated outstanding achievements in providing warfighters with exceptional operational capabilities.

The 478th AESW, together with the 77th Aeronautical Systems Wing, pursued the Air Force and DoD-directed effort. The team developed a 10-year, weapon-system level, sole-source, performance-based agreement. The arrangement incorporates significant public-private partnering with the F-22 manufacturer, Lockheed Martin Aeronautics; and the F-119 engine manufacturer, Pratt & Whitney. Innovative teaming and process management resulted in the first F-22 stand-alone sustainment contracts worth \$1.5 billion, for calendar years 2008 and 2009, which led to the highest readiness rates in the program's history.

Through ingenious application of Air Force Smart Operations for the 21st century, the team drastically shortened the standard 18-month proposal process to 10 months. The team drove an agreement for a 20 percent improvement in aircraft availability, which equates to seven additional F-22s in warfighters' hands. Additionally, the team delivered an amazing 15 percent improvement in mission capable rates, while repair rates saw impressive results with a 20 percent reduction in time. For the warfighter,

the team overcame monumental obstacles to accelerate the activation of the F-22 unit at Elmendorf AFB, Alaska, by a full two years.

"The award is a huge win for the 478th, the air logistics centers, contractors, and Aeronautical Systems Center. It's an even more significant and enabling win for our warfighters, providing them with better ability to fly, fight, and win," said Thomas Severyn, the 478th AESW director.

NAVAL SURFACE WARFARE CENTER DAHLGREN PUBLIC AFFAIRS (AUG. 25, 2008)

U.S. NAVY, SMALL BUSINESS PARTNER TO DELIVER NEW CAPABILITIES

DAHLGREN, Va.—Naval Surface Warfare Center Dahlgren, a Naval Sea Systems Command field activity, signed a cooperative research and development agreement (CRADA) with Fredericksburg, Va.-based Sim Ventions Inc., at NSWC Dahlgren, Va., Aug. 14.

The agreement will enable collaboration and sharing data rights to design, develop, test, and deliver new open architecture (OA) components and capability to the fleet.

Using OA, common parts and support for legacy systems, NAVSEA and its field activities constantly modernize shipboard systems to maintain the nation's fleet on the cutting edge of technology.

"This agreement is advantageous to both government and Sim Ventions," said NSWC Dahlgren Division Commander Capt. Sheila Patterson.

"It will contribute to the overall defense acquisition process while providing Navy customers, acquisition, and fleet better capability than is currently available in a more cost- and time-efficient manner."

The cooperation between NSWC Dahlgren Division and Sim Ventions engineers, scientists, and developers is expected to improve planning, development, and testing associated with OA tactical components and management tools.

"We have built our company by teaming with NSWC open architecture and engineering efforts," said Sim Ventions President Larry Root after signing the agreement with Patterson. "I see the CRADA as an extension of our relationship with NSWC. It will help us take the relationship to the next step."

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This cooperation includes shared access to the integrated warfare systems lab, the open architecture test facility, the human performance lab, and the integrated command environment facilities.

For more news from Naval Surface Warfare Center Dahlgren Division, visit < www.news.navy.mil/local/nswcdahlgren/ > .

ARMY ACQUISITION SUPPORT CENTER (AUGUST 2008)

ARMY ACQUISITION PROFESSIONAL RECOGNIZED BY PRIVATE INDUSTRY

Sarah Maxwell

The U.S. Army Medical Research and Materiel Command's (MRMC) Bill Howell was selected above many of his civilian peers by the Medical Device & Diagnostic Industry as being one of the most notable people in his field. Howell has been MRMC's principal assistant for acquisition since 2005.

"I was very surprised but pleased by such recognition because it comes from the commercial medical device industry vice the military establishment," said Howell. "If I have any accomplishments to tout, it is my ability

to understand the market segments, be flexible in how I approach their potentials, and remember that both sides [industry and the Army] must be satisfied to build a lasting supplier of valuable goods."

Howell's leadership impacts more than \$300 million in medical technology development from proof-of-concept through to procurement, according to his nomination letter.

"We are aware that the military, in particular, MRMC, is a major contributor of the funds and manpower [for] medical device development," said Sherrie Conroy, editor-in-chief *MD&DI* magazine, which is the industry's leader in news and information. Hemostatic (chitosan) bandages and digitally enhanced imaging are just two examples of equipment developed through Howell's office to meet the Army's needs but are now a part of the greater civilian healthcare industry.

Howell will retire this fall after 34 years of government service working for the U.S. Army.

Maxwell works for MRMC Public Affairs Office.

A Six-pack of Tips for Defense AT&L Authors

1 Look at back issues of the magazine. If we printed an article on a particular topic a couple of issues ago, we're unlikely to print another for a while—unless it offers brand new information or a different point of view.

2 We look on articles much more favorably if they follow our author guidelines on format, length, and presentation. You'll find them at < www.dau.mil/pubs/dam/DAT&L%20author%20guidelines.pdf >.

3 Number the pages in your manuscript and put your name on every page. It makes our life so much easier if we happen to drop a stack of papers and your article's among them.

4 Do avoid acronyms as far as possible, but if you must use them, define them—every single one, however obvious you think it is. We get testy if we have to keep going to [acronym](#)

[finder.com](#), especially when we discover 10 equally applicable possibilities for one acronym.

5 Fax the *Certification as a Work of the U.S. Government/Copyright Release* form when you e-mail your article because we can't review your manuscript until we have the release. Download it at < www.dau.mil/pubs/dam/DAT&L%20certification.pdf >. Please don't make us chase you down for it. And please fill it out completely, even if you've written for us before.

6 We'll acknowledge receipt of your submission within three or four days and e-mail you a publication decision in four to five weeks. No need to remind us. We really will. Scout's honor.

AT&L Workforce—Key Leadership Changes

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 11, 2008)

GENERAL OFFICER ANNOUNCEMENTS

Secretary of Defense Robert M. Gates announced yesterday that the president made the following nominations:

Marine Corps Col. Juan G. Ayala has been nominated for appointment to the rank of brigadier general. Ayala is currently serving as the commander, 2^d Marine Logistics Group in Camp Lejeune, N.C.

Marine Corps Col. William M. Faulkner has been nominated for appointment to the rank of brigadier general. Faulkner is currently serving as the commander, 3^d Marine Logistics Group in Okinawa, Japan.

Marine Corps Col. Glenn M. Walters has been nominated for appointment to the rank of brigadier general. Walters is currently serving as the head, Aviation Weapons Systems Requirements in Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 15, 2008)

GENERAL OFFICER ANNOUNCEMENTS

Secretary of Defense Robert M. Gates announced today that the president has made the following nominations:

Army Col. Robert S. Ferrell for promotion to the grade of brigadier general. He is currently enroute to serve as director, Future Combat System Strategic Communications, Army Capabilities Integration Center-Forward, Arlington, Va.

Army Col. Thomas A. Horlander for promotion to the grade of brigadier general. He is currently en route to serve as director for resource management, Installation Management Command, Arlington, Va.

Army Col. Camille M. Nichols for promotion to the grade of brigadier general. She is currently serving as commander, U.S. Army Expeditionary Contracting Command, Fort Belvoir, Va.

Army Col. John R. O'Connor for promotion to the grade of brigadier general. He is currently serving as deputy commander/director of operations, Military Surface Deployment and Distribution Command, Fort Eustis, Va.

Army Col. Gustave F. Perna for promotion to the grade of brigadier general. He is currently serving as commander, Defense Supply Center-Philadelphia, Philadelphia, Pa.

Army Col. Nancy L. Price for promotion to the grade of brigadier general. She is currently serving as deputy program manager, Future Combat System Brigade Combat Team, Program Integration (Network/Complementary Programs), Aberdeen Proving Ground, Md.

Army Col. Jess A. Scarbrough for promotion to the grade of brigadier general. He is currently serving as assistant deputy for acquisition and systems management, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology), Washington, D.C.

Army Col. Leslie C. Smith for promotion to the grade of brigadier general. He is currently serving as commandant, U.S. Army Chemical, Biological, Radiological and Nuclear School/ deputy commander, Material and Technology, U.S. Army Maneuver Support Center, Fort Leonard Wood, Mo.

Army Col. Jeffrey J. Snow for promotion to the grade of brigadier general. He is currently serving as commander, 20th Support Command (Chemical, Biological, Radiological, Nuclear, and High-yield Explosive), Aberdeen Proving Ground, Md.

Army Col. John Uberti for promotion to the grade of brigadier general. He is currently serving as commander, Installation Management Command, Korea Region, Korea.

Army Col. John F. Wharton for promotion to the grade of brigadier general. He is currently serving as deputy commander, U.S. Army Field Support Command, with duty as commander, Army Materiel Command Forward-Southwest Asia/G-4, U.S. Army Central Command, MacDill Air Force Base, Fla.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 18, 2008)

SENIOR EXECUTIVE SERVICE APPOINTMENTS

Secretary of Defense Robert M. Gates announced the following Department of Defense Senior Executive Service appointments:

John B. Johns, assistant deputy under secretary of defense for maintenance policy and programs, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Washington, D.C.

Joseph E. Misanin, deputy director, program operations, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Washington, D.C.

AT&L Workforce—Key Leadership Changes

Alan R. Shaffer, director, plans and programs, reassigned to principal deputy director, defense research and engineering/director, plans and programs, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Washington, D.C.

Robin Staffin, director for basic research, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 21, 2008) GENERAL OFFICER ANNOUNCEMENT

Secretary of Defense Robert M. Gates announced today that the President has made the following nomination: **Army Reserve Brig. Gen. Dempsey D. Kee** has been nominated for appointment to the grade of major general and assignment as deputy director for logistics operations, J-4, Joint Staff, Washington, D.C. Kee is currently serving as deputy director, Reserve Component Mobilization, J-92, (individual mobilization augmentee), Defense Logistics Agency, Fort Belvoir, Va.

DEPARTMENT OF DEFENSE NEWS RELEASE (JULY 22, 2008) FLAG OFFICER ASSIGNMENTS

Chief of Naval Operations Adm. Gary Roughead announced today the following assignments:

Rear Adm. (lower half) Steven R. Eastburg is being assigned as program executive officer, air anti-submarine warfare, assault and special mission programs, Patuxent River, Md. Eastburg is currently serving as commander, Naval Air Warfare Center Aircraft Division/assistant commander for research and engineering, Naval Air Systems Command, Patuxent River, Md.

Capt. Donald E. Gaddis, who has been selected to the rank of rear admiral (lower half), is being assigned as commander, Naval Air Warfare Center aircraft division/assistant commander for research and engineering, Naval Air Systems Command, Patuxent River, Md. Gaddis is currently serving as program manager for Presidential Helicopters, Program Executive Office for Aviation, Patuxent River, Md.

ARMY NEWS SERVICE (JULY 24, 2008) GENERAL OFFICER ANNOUNCEMENT

WASHINGTON—The U.S. Senate confirmed July 23 the appointment of Lt. Gen. Ann E. Dunwoody to the grade of four-star general.

Dunwoody, who will be the first woman to serve as a four-star general in the U.S. military, was also confirmed for assignment as commanding general, U.S. Army Materiel Command, headquartered at Fort Belvoir, Va.

"I am truly humbled to be able to continue to serve my country in uniform," Dunwoody said. "I am extremely honored to be selected to lead the men and women of Army Materiel Command—the military, civilian personnel, and contractors of AMC, who are among the nation's finest men and women—who continue to serve with dedication during these difficult and uncertain times."

Dunwoody's confirmation as a four-star general is the latest achievement for women in the military, dating back to Mary Marshall and Mary Allen, who served as ship nurses during the War of 1812, to Brig. Gen. Anna Mae Hays, the first female general officer in the U.S. Armed Forces. About 5 percent of general officers in the U.S. Army are women, officials said, adding that this includes mobilized Army Reserve and Army National Guard general officers.

"I have never considered myself anything but a soldier," Dunwoody said. "I recognize that with this selection, some will view me as a trailblazer, but it's important that we remember the generations of women whose dedication, commitment, and quality of service helped open the doors of opportunity for us today. There are so many talented women in our Army today ... you would be impressed. So what's even more exciting for me is knowing that while I may be the first, I know I won't be the last. I'm thrilled with this selection and proud to continue to serve!"

Prior to her recent appointment as deputy commanding general and chief of staff of AMC, Dunwoody served as deputy chief of staff, G-4, United States Army, Washington, D.C.

Dunwoody entered the Army in 1975, and served first as a platoon leader with the 226th Maintenance Company, 100th Supply and Services Battalion, Fort Sill, Okla.

During her 33-year Army career, Dunwoody has served as the commander for the 5th Quartermaster Detachment, 66th Maintenance Battalion, 29th Area Support Group, Germany; commander of the Division Support Command, 10th Mountain Division, Fort Drum, N.Y.; and commanding general, United States Army Combined Arms Support Command and Fort Lee, Fort Lee, Va. She is the recipient of the Distinguished Service Medal, with oak leaf cluster;

AT&L Workforce—Key Leadership Changes

the Defense Superior Service Medal; the Legion of Merit, with two oak leaf clusters; the Defense Meritorious Service Medal; the Meritorious Service Medal, with five oak leaf clusters; and the Army Commendation Medal. The general has also earned the master parachutist badge and the parachutist rigger badge.

AIR FORCE PRINT NEWS (JULY 28, 2008) ASSISTANT SECRETARY RESIGNS

WASHINGTON—Acting Secretary of the Air Force Michael B. Donley accepted a letter of resignation July 28 from William C. “Bill” Anderson, assistant secretary of the Air Force for installations, environment and logistics. Anderson’s resignation will take effect Aug. 15.

“Mr. Anderson is enormously talented, very experienced, and has superb strategic vision,” said Donley. The secretary praised Anderson’s leadership, citing the Air Force’s progress in alternative fuels, energy conservation, and energy partnerships at the local, state, and international levels.

AMERICAN FORCES PRESS SERVICE (AUG. 1, 2008) SENATE CONFIRMS AIR FORCE GENERALS FOR KEY POSITIONS

WASHINGTON—The Senate confirmed Aug. 1 two Air Force generals nominated by President Bush for key positions: **Gen. Norton A. Schwartz**, commander of U.S. Transportation Command, will be Air Force chief of staff; **Gen. Duncan J. McNabb**, Air Force vice chief of staff, will succeed Schwartz as TRANSCOM commander.

Schwartz will succeed Gen. T. Michael Moseley as the Air Force’s top officer. Moseley stepped down in June in the wake of a report critical of the Air Force’s handling of its nuclear weapons program.

DEPARTMENT OF DEFENSE NEWS RELEASE (AUG. 6, 2008) FLAG OFFICER ASSIGNMENTS

Chief of Naval Operations Adm. Gary Roughead announced today the following assignments:

Rear Adm. William E. Landay III is being assigned as program executive officer for ships, Washington, D.C. Landay is currently serving as chief of Naval Research and director, Test and Evaluation and Technology Requirements, N091, Office of the Chief of Naval Operations, Washington, D.C.

Rear Adm. (lower half) Thomas J. Eccles is being assigned as deputy commander for ship design, integration, and engineering, SEA-05, Naval Sea Systems Command, Washington, D.C. Eccles is currently serving as deputy commander for undersea warfare, SEA-07, Naval Sea Systems Command, Washington, D.C.

Capt. David C. Johnson is being assigned as deputy commander for undersea technology, SEA-073, Naval Sea Systems Command, Washington, D.C. Johnson is currently serving as major program manager for Virginia (SSN 774) Class Submarine Programs, Program Executive Office for Submarines, Washington, D.C.

DEPARTMENT OF DEFENSE NEWS RELEASE (AUG. 8, 2008) GENERAL OFFICER ASSIGNMENT

The Army Chief of Staff announces the assignment of the following officer: **Brig. Gen. Peter S. Lennon**, U.S. Army Reserve, deputy commander for mobilization (individual mobilization augmentee), Military Surface Deployment and Distribution Command, Fort Eustis, Va., to deputy director, logistics, CCJ-4, U.S. Central Command, MacDill Air Force Base, Fla.



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If you're interested in having longer, scholarly articles considered for publication in the *Defense Acquisition Review Journal*, or if you're a subject matter expert and would be willing to referee articles, contact the managing editor at [defensearj\(at\)dau.mil](mailto:defensearj(at)dau.mil). Be sure to check the guidelines for authors at < www.dau.mil/pubs/arq/arqtoc.asp > .

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Surfing the Net



Acquisition Central <http://acquisition.gov>

Shared systems and tools to support the federal acquisition community and business partners.

Acquisition Community Connection (ACC)

<http://acc.dau.mil>

Policies, procedures, tools, references, publications, Web links, and lessons learned for risk management, contracting, system engineering, TOC.

Aging Systems Sustainment and Enabling Technologies (ASSET) <http://asset.okstate.edu/asset/index.htm>

Government-academic-industry partnership. ASSET program-developed technologies and processes expand the DoD supply base, reduce time and cost of parts procurement, enhance military readiness.

Air Force (Acquisition) www.safaq.hq.af.mil

Policy; career development and training opportunities; reducing TOC; library; links.

Air Force Institute of Technology www.afit.edu

Graduate degree programs and certificates in engineering and management; Civilian Institution; Center for Systems Engineering; Centers of Excellence; distance learning.

Air Force Materiel Command (AFMC) Contracting Laboratory's FAR Site <http://farsite.hill.af.mil>

FAR search tool; *Commerce Business Daily* announcements (CBDNet); *Federal Register*; electronic forms library.

Army Acquisition Support Center <http://asc.army.mil>

News; policy; *Army AL&T Magazine*; programs; career information; events; training opportunities.

Army Training Requirements and Resources System

<https://www.atrrs.army.mil>

Army system of record for managing training requirements.

Assistant Secretary of the Army (Acquisition, Logistics & Technology)

<https://webportal.saalt.army.mil>

ACAT Listing; ASA(ALT) Bulletin; digital documents library; links to other Army acquisition sites.

Association for the Advancement of Cost Engineering International (AACEI) www.aacei.org

Planning and management of cost and schedules; online technical library; book-

store; technical development; distance learning.

Association of Old Crows (AOC)

www.crows.org

News; conventions, courses; *Journal of Electronic Defense*.

Association of Procurement Technical Assistance Centers (APTAC)

www.aptac-us.org

PTACs nationwide assist businesses with government contracting issues.

AT&L Knowledge Sharing System

<http://akss.dau.mil>

Automated acquisition reference tool covering mandatory and discretionary practices.

Central Contractor Registry

<http://www.ccr.gov/>

Registration for businesses wishing to do business with the federal government under a FAR-based contract.

Committee for Purchase from People Who are Blind or Severely Disabled

www.abilityone.gov

Information and guidance to federal customers on the requirements of the Javits-Wagner-O'Day (JWOD) Act.

Defense Acquisition University (DAU) and Defense Systems Management College (DSMO)

www.dau.mil

DAU Course Catalog; *Defense AT&L* magazine and *Defense Acquisition Review Journal*; DAU/DSMC course schedules; educational resources.

DAU Alumni Association

www.dauaa.org

Acquisition tools and resources; links; career opportunities; member forums.

DAU Distance Learning Courses

www.dau.mil/registrar/enroll.asp

DAU online courses.

Defense Advanced Research Projects Agency (DARPA)

www.darpa.mil

News releases; current solicitations; *Doing Business with DARPA*.

Defense Business Transformation Agency (BTA)

www.acq.osd.mil/scst/index.htm

Policy; newsletters; Central Contractor Registration (CCR); assistance centers; DoD EC partners.

Defense Information Systems Agency (DISA)

www.disa.mil

Defense Information System Network; Defense Message System; Global Command and Control System.

Defense Modeling and Simulation Office (DMSO)

www.dmsi.mil

DoD modeling and simulation master plan; document library; events; services.

Defense Technical Information Center (DTIC)

www.dtic.mil/

DTIC's scientific and technical information network (STINET) is one of DoD's largest available repositories of scientific, research, and engineering information. Hosts over 100 DoD Web sites.

Deputy Under Secretary of Defense for Acquisition, Technology and Logistics (DUSD(AT&L))

www.acq.osd.mil/at

Acquisition and technology organization, goals, initiatives, and upcoming events.

Director, Defense Procurement and Acquisition Policy (DPAP)

www.acq.osd.mil/dpap

Procurement and acquisition policy news and events; reference library; acquisition education and training policy, guidance.

DoD Acquisition Best Practices Clearinghouse

<https://bpch.dau.mil>

The authoritative source for acquisition best practices in DoD and industry. Connects communities of practice, centers of excellence, academic and industry sources, and practitioners.

DoD Defense Standardization Program

www.dsp.dla.mil

DoD standardization; points of contact; FAQs; military specifications and standards reform; newsletters; training; nongovernment standards; links.

DoD Enterprise Software Initiative (ESI)

www.esi.mil

Joint project to implement true software enterprise management process within DoD.

DoD Inspector General Publications

www.dodig.osd.mil/pubs/

Audit and evaluation reports; IG testimony; planned and ongoing audit projects of interest to the AT&L community.

DoD Office of Technology Transition

www.acq.osd.mil/ott

Information about and links to OTT's programs.

DoD Systems Engineering

www.acq.osd.mil/se

Policies, guides and information on SE and related topics, including developmental T&E and acquisition program support.

Earned Value Management

www.acq.osd.mil/pm

Implementation of EVM; latest policy changes; standards; international developments.

Electronic Industries Alliance (EIA)

www.eia.org

Government relations department; links to issues councils; market research assistance.

Federal Acquisition Institute (FAI)

www.fai.gov

Virtual campus for learning opportunities; information access and performance support.

Federal Acquisition Jumpstation

<http://prod.nais.nasa.gov/pub/fedproc/home.htm>

Procurement and acquisition servers by contracting activity; CBDNet; reference library.

Federal Aviation Administration (FAA)

<http://fast.faa.gov>

Online policy and guidance for all aspects of the acquisition process.

Federal Business Opportunities

www.fedbizopps.gov

Single government point-of-entry for federal government procurement opportunities over \$25,000.

Federal R&D Project Summaries

www.osti.gov/fedrnd/about

Portal to information on federal research projects; search databases at different agencies.

Federal Research in Progress (FEDRIP)

<http://grc.ntis.gov/fedrip.htm>

Information on federally funded projects in the physical sciences, engineering, life sciences.

Fedworld Information

www.fedworld.gov

Central access point for searching, locating, ordering, and acquiring government and business information.

Government Accountability Office (GAO)

<http://www.gao.gov>

GAO reports; policy and guidance; FAQs.

General Services Administration (GSA)

www.gsa.gov

Online shopping for commercial items to support government interests.

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Government-Industry Data Exchange Program (GIDEP)

www.gidep.org

Federally funded co-op of government-industry participants, providing electronic forum to exchange technical information essential to research, design, development, production, and operational phases of the life cycle of systems, facilities, and equipment.

GOV.Research_Center

http://grc.ntis.gov

U.S. Dept. of Commerce, National Technical Information Service, and National Information Services Corporation joint venture, single-point access to government information.

Integrated Dual-Use Commercial Companies (IDCC)

www.idcc.org

Information for technology-rich commercial companies on doing business with the federal government.

International Society of Logistics

www.sole.org

Online desk references that link to logistics problem-solving advice; Certified Professional Logistician certification.

International Test & Evaluation Association (ITEA)

www.itea.org

Professional association to further development and application of T&E policy and techniques to assess effectiveness, reliability, and safety of new and existing systems and products.

Joint Capability Technology Demonstrations (JCTD)

www.acq.osd.mil/jctd

JCTD's accomplishments, articles, speeches, guidelines, and POCs.

U.S. Joint Forces Command

www.jfcom.mil

"Transformation laboratory" that develops and tests future concepts for warfighting.

Joint Fires Integration and Interoperability Team

https://jfiit.eglin.af.mil

USJFCOM lead agency to investigate, assess, and improve integration, interoperability, and operational effectiveness of Joint Fires and Combat Identification across the Joint warfighting spectrum. (Accessible from .gov and .mil domains only.)

Joint Interoperability Test Command (JITC)

http://jitc.fhu.disa.mil

Policies and procedures for interoperability certification; lessons learned; support.

Joint Spectrum Center (JSC)

www.jsc.mil

Operational spectrum management support to the Joint Staff and COCOMs; conducts R&D into spectrum-efficient technologies.

Library of Congress

www.loc.gov

Research services; Copyright Office; FAQs.

MANPRINT (Manpower and Personnel Integration)

www.manprint.army.mil

Points of contact for program managers; relevant regulations; policy letters from the Army Acquisition Executive; briefings on the MANPRINT program.

National Aeronautics and Space Administration (NASA)'s Commercial Technology Office (CTO)

http://technology.grc.nasa.gov

Promotes competitiveness of U.S. industry through commercial use of NASA technologies and expertise.

National Contract Management Association (NCMA)

www.ncmahq.org

Educational products catalog; publications; career center.

National Defense Industrial Association (NDIA)

www.ndia.org

Association news; events; government policy; *National Defense* magazine.

National Geospatial-Intelligence Agency

www.nima.mil

Imagery; maps and geodata; Freedom of Information Act resources; publications.

National Institute of Standards and Technology (NIST)

www.nist.gov

Information about NIST technology, measurements, and standards programs, products, and services.

National Technical Information Service (NTIS)

www.ntis.gov

Online service for purchasing technical reports, computer products, videotapes, audiocassettes.

Naval Sea Systems Command

www.navsea.navy.mil

TOC; documentation and policy; reduction plan; implementation timeline; TOC reporting templates; FAQs.

Navy Acquisition and Business Management

www.abm.rda.hq.navy.mil

Policy documents; training opportunities; guides on risk management, acquisition environmental issues, past performance; news and assistance for the Standardized Procurement System (SPS) community; notices of upcoming events.

Navy Acquisition, Research and Development Information Center

www.onr.navy.mil/sci_tech

News and announcements; publications and regulations; technical reports; doing business with the Navy.

Navy Best Manufacturing Practices Center of Excellence

www.bmpcoe.org

National resource to identify and share best manufacturing and business practices in use throughout industry, government, academia.

Naval Air Systems Command (NAVAIR)

www.navair.navy.mil

Provides advanced warfare technology through the efforts of a seamless, integrated, worldwide network of aviation technology experts.

Office of Force Transformation

www.oft.osd.mil

News on transformation policies, programs, and projects throughout DoD and the Services.

Open Systems Joint Task Force

www.acq.osd.mil/osjtf

Open systems education and training opportunities; studies and assessments; projects, initiatives and plans; library.

Parts Standardization and Management Committee (PSMC)

www.dscc.dla.mil/programs/psmc

Collaborative effort between government and industry for parts management and standardization through commonality of parts and processes.

Performance-based Logistics Toolkit

https://acc.dau.mil/pbltoolkit

Web-based 12-step process model for development, implementation, and management of PBL strategies.

Project Management Institute

www.pmi.org

Program management publications; information resources; professional practices; career certification.

Small Business Administration (SBA)

www.sba.gov

Communications network for small businesses.

DoD Office of Small Business Programs

www.acq.osd.mil/osbp

Program and process information; current solicitations; Help Desk information.

Software Program Managers Network

www.spmn.com

Supports project managers, software practitioners, and government contractors. Contains publications on highly effective software development best practices.

Space and Naval Warfare Systems Command (SPAWAR)

https://e-commerce.spawar.navy.mil

SPAWAR business opportunities; acquisition news; solicitations; small business information.

System of Systems Engineering Center of Excellence (SoSECE)

www.sosece.org

Advances the development, evolution, practice, and application of the system of systems engineering discipline across individual and enterprise-wide systems.

Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L))

www.acq.osd.mil

USD(AT&L) documents; streaming videos; links.

U.S. Coast Guard

www.uscg.mil

News and current events; services; points of contact; FAQs.

U.S. Department of Transportation Maritime Administration

www.marad.dot.gov

Information and guidance on the requirements for shipping cargo on U.S. flag vessels.

Links current at press time. To add a non-commercial defense acquisition/acquisition and logistics-related Web site to this list, or to update your current listing, please fax your request to *Defense AT&L*, 703-805-2917 or e-mail [datl\(at\)dau.mil](mailto:datl(at)dau.mil). Your description may be edited and/or shortened. DAU encourages the reciprocal linking of its home page to other interested agencies. Contact: [webmaster\(at\)dau.mil](mailto:webmaster(at)dau.mil).

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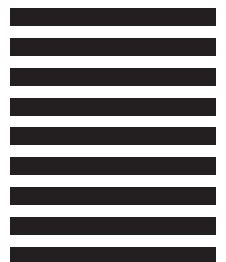
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Defense AT&L Writer's Guidelines in Brief

Purpose

Defense AT&L is a bi-monthly magazine published by DAU Press, Defense Acquisition University, for senior military personnel, civilians, defense contractors, and defense industry professionals in program management and the acquisition, technology, and logistics workforce. The magazine provides information on policies, trends, events, and current thinking regarding program management and the acquisition, technology, and logistics workforce.

Submission Procedures

Submit articles by e-mail to [datl\(at\)dau.mil](mailto:datl(at)dau.mil) or on disk to: DAU Press, ATTN: Carol Scheina, 9820 Belvoir Rd., Suite 3, Fort Belvoir VA 22060-5565. Submissions must include the author's name, mailing address, office phone number, e-mail address, and fax number.

Receipt of your submission will be acknowledged in five working days. You will be notified of our publication decision in two to three weeks.

Deadlines

Issue	Author Deadline
July-August	1 October
March-April	1 December
May-June	1 February
July-August	1 April
September-October	1 June
November-December	1 August

If the magazine fills before the author deadline, submissions are considered for the following issue.

Audience

Defense AT&L readers are mainly acquisition professionals serving in career positions covered by the Defense Acquisition Workforce Improvement Act (DAWIA) or industry equivalent.

Style

Defense AT&L prints feature stories focusing on real people and events. The magazine also seeks articles that reflect your experiences and observations rather than pages of researched information.

The magazine does not print academic papers; fact sheets; technical papers; white papers; or articles with footnotes, endnotes, or references. Manuscripts meeting any of those criteria are more suited to DAU's journal, *Acquisition Review Journal* (ARJ).

Defense AT&L does not reprint from other publications. Please do not submit manuscripts that have appeared in print elsewhere. *Defense AT&L* does not publish endorsements of products for sale.

Length

Articles should be 1,500 – 2,500 words.

Format

Submissions should be sent via e-mail as a Microsoft® Word attachment.

Graphics

Do not embed photographs or charts in the manuscript. Digital files of photos or graphics should be sent as e-mail attachments or mailed on zip disks or CDs (see address above). Each figure or chart must be saved as a separate file in the original software format in which it was created.

TIF or JPEG files must have a resolution of 300 pixels per inch; enhanced resolutions are not acceptable; images downloaded from the Web are not of adequate quality for reproduction. Detailed tables and charts are not accepted for publication because they will be illegible when reduced to fit at most one-third of a magazine page.

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Author Information

Contact and biographical information will be included with each article selected for publication in *Defense AT&L*. Please include the following information with your submission: name, position title, department, institution, address, phone number, and e-mail address. Also, please supply a short biographical statement, not to exceed 25 words, in a separate file. We do not print author bio photographs.

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